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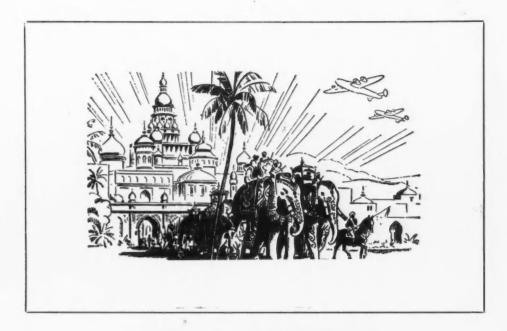
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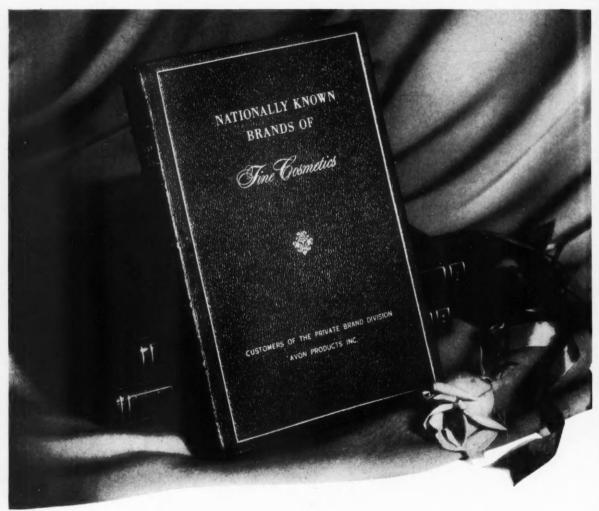
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COSMETICS

SOAPS

FLAVORS

Established 1906

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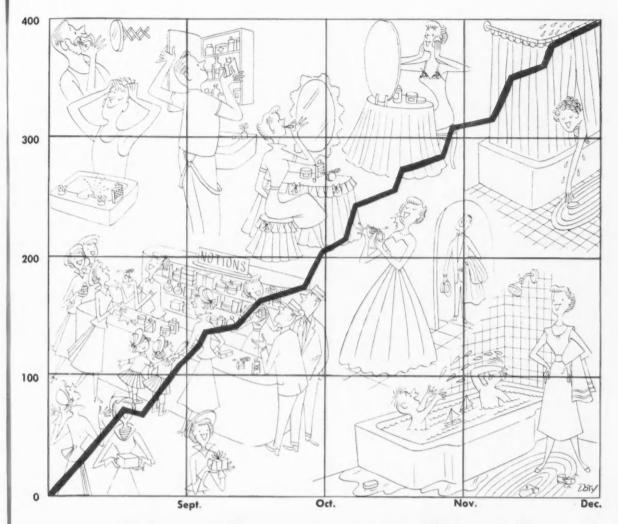
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(Olfactive Sense)

Chemical Senses, page 1, Moncrief—lists senses as follows: "sight, hearing, touch, taste, smell." Note smell is listed Fifth.



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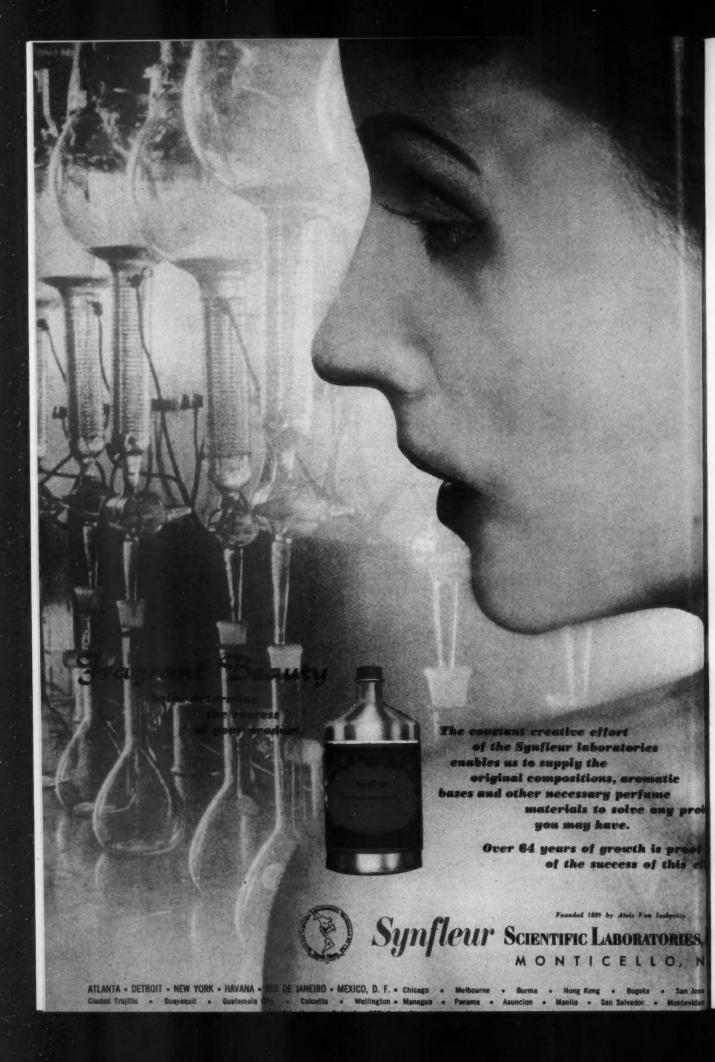
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The Detroit New

BY MAISON G. DENAVARRE, F.A.I.C.

"With Lanolin"

Writing in the August issue of "Today's Health" (formerly Hygeia), Veronica Conley contributes an article entitled "Lanolin Does Have Limitations." The ancient Greeks used it under the name oesypus. It provides an oily coating, thus protecting skin from effect of wind and cold. The writer deplores (and well she might) the exaggerated claims for it in conjunction with excessive dryness and wrinkle formation, and that lanolin will make "hidden curls" become more noticeable, etc.

Lanolin has been a useful cosmetic ingredient. It is an emulsifier, emollient, coupling agent, plasticizer, tackifier and conditioner. In some respects, it resembles sebum in composition. As a result, it may lead to some interesting findings on the cause of certain dermatologic disorders.

On the other hand, except for verbal repetition and long usage, there has been no scientific evidence published to show that it has superior properties over other emollients. We have accepted it as an emollient and no one seems to have questioned the fact.

My own feeling is that lanolin is a useful ingredient chemically and dermatologically. But, as a chemist, I'd like to see some facts on its skin value, just as I have seen on its value as a cosmetic emulsifier, for example.

Egg Oil

A recent publication by Bandelin and Fuschhoff in the J. A. Ph. A. for February, 1953, discusses the use of a new type of egg oil, lower in odor and color, which has some properties as an emulsifier and oth-

erwise useful improving agent for cosmetic preparations.

The egg oil in question contains a little over 60 per cent true fats, about 33 per cent phospholipids, about 5 per cent sterols and traces of cerebrosides. The authors of the article mentioned, give some formulas for an oil base, creams, hand lotion, shampoo and shaving cream.

My own examination of the oil indicates that even though it has been substantially improved—and I have looked at an exceedingly recent sample still further improved—the oil still required substantial covering to overcome the objectionable odor characteristics of the material.

While egg oil is suggested as a potential replacement for lanolin as an emollient, it, like lanolin, will have to go through a lot more improvement before it is widely used. Some of us remember in the old days (meaning twenty-five years ago or longer) lanolin was not of the best quality and as a result, was limited in its use. It is only in recent times that quantities in excess of 5 per cent lanolin can be safely used in esthetic cosmetics.

Notes

Munan reports that subcutaneous injections of adrenaline, partly oxidized and unbuffered, caused temporary alopecia in pigmented rats: the regrowth of hair lacked the black pigment and the graying is permanent. (C.A. 47,1953,p.6017). — Metallizing easily corroded parts with silver can often stop corrosion. . . . There is a book published on this process by one of the big makers of the equipment.—Did you know that in many cases sticking parts used in compression can be made of

Teflon, with no sticking at all? -Just patented, a hydraulic adjustment of rolls on Roller Mill . prevents uneven milling. - You can paint a metal sunshade on your roof now . . . the coating reflects up to 70% radiant heat, dropping inside temperature up to 26° ease the load on your air conditioning unit, if you have one. - Gem culled from T.G.M.A. Convention "Demonstrators should be abolished" . . . from a department store T. G. buyer too. — C.S.M.A. estimate of room deodorant aerosols filled in 1952 is about 121/2 million cans . . . Aerosol Shaves, over 161/2 million cans. - Broken skin shows an affinity for Methionine as proved by tagged material . . . it ends up as cystine using S35 in methionine. - "Quats" apparently just won't work out in a deodorant talc . the material seems to be so strongly absorbed by the fine powder that it isn't available to do its job as a germicide. - There is to be a new source of pure palmitic acid soon . . . you can then blend your own palmitic and stearic (now available in 97% purity commercially) acids to suit your needs. Now Lord and Parker are comparing hexachlorophene soaps with D.C.M.X. soaps in Soap, Perfumery and Cosmetics, May issue Freddy Wells, in an editorial "Quaternaries in Cosmetics," mentions U.S. Patent 2,395,783 which covers the use of quaternaries in hair dyes-using material covered by this patent we couldn't get satisfactory shades at all, Fred the brown and blacks in particular, gave pinks and greens-no, the problem is not yet solved. . . . If you have been getting cortisone, your skin will tan, not blister, and you can stand twice the exposure of a person not taking cortisone.



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. . Rapp's article on chlorophyll in the March J. Soc. Cosmetic Chemists is a real thumbnail education on chlorophyll for chemists and laymen alike. . . . The farther I read into Sisley's book, The Encyclopedia of Surface Active Agents, the madder I get-his supplier index, at least the English translation, is lousy-the codes under trade named materials and the key do not match. . . . Bromine. like chlorine, is hard to handlebut as in the case of chlorine, which was made into a dichloro dimethyl hydantoin, the bromine is now hooked up in the hydantoin. capable of releasing 55 per cent bromine. . . . I am most grateful to the many friends throughout the British Commonwealth of Nations for the Coronation stamps they thoughtfully sent to add to my stamp collection. . . . Vilter et al. find that external application of Pyridoxine has a beneficial effect

on seborrheic dermatitis. . . . Everall and Fisher are unable to protect skin from ultraviolet light effects by external application of adrenocortical hormones . . . earlier it was reported by others that internal treatment with the hormone gave external U.V. protection. . Congratulations to Dr. Daniel Couch on his elevation to Fellow in the Royal Institute of Chemistry and the Canadian Institute of Chemistry . . . he deserves it. . . . Also, another long and good friend. William (Bill) Lambert, Editor of THE AMERICAN PERFUMER, has been made an Honorary Member of the American Society of Perfumers . . . he is the second . . . Congratula-tions, Bill! . . . Frank J. Steele (Greenwich Hospital Assn.) will teach a course in cosmetics this fall in that town . . . while Bob Merrill (Yardley) who taught a cosmetic course in Toronto, will not do so this year.

Questions and Answers

1028: Bay Rum, Sage Hair Tonic

Q. I wonder if you would be good enough to furnish me with a good formula for a sage hair tonic and bay rum after shaving lotion. The two should not be too costly to manufacture, inasmuch as they are intended for barber shop sale.

R.B.D., So. Carolina

A. If you do not care to buy distilled bay rum then we suggest you contact one of the suppliers of perfume compound who regularly advertise in THE AMERICAN PER-FUMER. They can supply the type of oil and a suggested formula for using it in evolving a reasonable facsimile of a bay rum type. If you want to convert this into a shaving lotion we would then suggest you add 1% of either zinc or aluminum sulfocarbolate. However, you will have to be very careful about traces of iron, otherwise the product will turn purple on you.

As for a sage hair tonic, the following is a formula suggested by

Chilson.

Bay rum	20.0%
Fluid extract of sage	5.000
Tincture of capsicum	1.500
	1.3%
Menthol	0.1%
Chloroform	4.00%

5.0% 62.85% Alcohol Water 0.25% Perfume

Dissolve the quinine sulfate and the menthol in a mixture of the chloroform and alcohol. Mix the fluid extract of sage with the bay rum, add the tincture of capsicum and perfume. Mix the bay rum solution with the water, add the quinine sulfate solution. Allow to stand three days and filter.

1029: Liquid Cream Shampoo

O. In your March, 1953 issue, under Questions and Answers, in Question No. 1002, you answered for a Cream Rinse to use 12 per cent of a cationic agent. Would vou please send the name of the supplier and the type of cationic agent to be used in this formula. I would like the formula for a liquid cream shampoo, and also the formula for an anti-drandruff hair rinse. M.K.L., No. Carolina

A. The name of the supplier of the cationic compound has been sent under separate cover.

The following will give you a good liquid cream shampoo:

Sodium alkyl 50% Sulfate Paste Ammonium Chloride

1% 0.4% 100% Magnesium Stearate Stearic Acid Water q.s.

We do not know what you mean by an anti-dandruff hair rinse. However, there are some cationic germicides which have hair substantive properties which might be used as both hair rinses and germicides.

1030: Accelerated Shelf Tests

O. We are interested in shortening the time element of shelf-life testing of cosmetic lotions and creams and would appreciate any information you can give us on accelerating this process. At the present time we hold an item in our oven over long periods of time at the estimated temperature the product will find in the retail store. We are wondering whether, if the test temperature is increased, the time element will be decreased? E.T.A., Oregon A. It is difficult to give you a procedure for accelerated shelf testing of cosmetics that will duplicate actual shelf tests. Generally speaking, 12 hour cycles, alternating between an ice box at 35° F. and an oven at 125°F. tend to duplicate most temperature extremes. These do not compensate for differences in altitude such as those expected in shipping over the Rockies. In addition, vibration, as that produced in an auto trunk, will further accelerate the test. Sometimes higher temperatures alone in the alternating hot and cold tests mentioned above, will work as well.

1031: Cream Formulation

O. We have been trying to formulate a greaseless, stable, cream containing hexachlorophene, resorcinol, sulphur and 10 per cent alcohol without success, and we are very hopeful that you can furnish us with a formulation for this type of product.

D. I. M., New York A. It is quite understandable why you are having trouble in formulating a greaseless stable cream containing the ingredients you mention. Off hand we would just hazard a guess that you could make a paste out of something like 10% of bentonite or related synthetic in water, containing the various ingredients you desire with a certain amount of humectant and plasticizing agent. The hexachlorophene is not soluble but, of course, neither is the sulphur. After making such a paste you would undoubtedly want to mill the product until smooth, avoiding contact with iron or discoloration may result.

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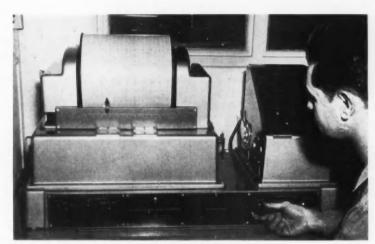


Fig. 1. An infrared spectrometer installed at Trubek Laboratories. This is one of or a dozen of such instruments in use in the cosmetic industry.

PAUL A. WILKS:*

Infrared Analysis for Cosmetics

TECENTLY there has been much speculation over the usefulness of the infrared spectrometer in the field of cosmetic chemistry. The instrument was the subject of several papers at scientific meetings of cosmetic chemists last Fall and more were given this Spring. During the same period, the instrument manufacturers have waged extensive sales campaigns which by now have reached nearly every member of the

Infrared spectrometry is not new-the properties of the infrared spectrum have been known for a hundred vears while reliable instruments have been commercially available for over a decade. It has become a standard analytical tool in nearly every branch of the chemical industry except in the field of cosmetics. The cosmetic chemist, because of his highly specialized problems, has developed his own methods and has been reluctant to change them. However, the few chemists in the industry who have acquired instruments have been able to apply them to many problems.

Why the Infrared Spectrometer is a Potent Tool

What makes the infrared spectrometer such a potent tool for the chemist? The answer to this question becomes apparent when one understands the physical principles on which its operation is based.

The properties of the phenomenon that we call light are thoroughly familiar to all of us. We have been taught since childhood that the sensation of light is produced by radiated energy which reaches our eyes in pulses of certain fixed frequencies. We know that white light, or light composed of all visible frequencies, can be broken into its various colors by means of a prism. Not so familiar is the fact that on either side of the visible spectrum lie energy radiation frequencies which have many of the same optical characteristics as light. Those frequencies just beyond the violet make up the ultra-violet spectrum-they are the frequencies that tan or sunburn our skins. Beyond the red, lies the infrared region which we experience as heat.

Color in objects is produced by selective absorption of visible radiation. A liquid appears red because it absorbs from white light all of the frequencies other than the red ones. The same type of absorption may take place in the invisible portions of the spectrum. Materials that are transparent in the visible can and do have "colors" in the ultra-violet and infrared regions.

The frequencies of radiation which a material absorbs are determined by the nature of the molecules cf the material. No two dissimilar molecules absorb exactly the same frequencies. Thus, a plot of the absorbed frequencies of a molecule is as characteristic of that molecule as is the fingerprint of a human being.

It happens that most organic chemicals absorb a

o The Perkin-Elmer Corp.

In addition to his research and quality control work, the cosmetic chemist spends a fair portion of his time analyzing his competitors' products. Infrared analysis can often answer many of his questions by identifying

both major and minor components.

Like everything else in this world, the infrared spectrometer is not all powerful-it does have its limitations and some of them are serious. For instance, water is an extremely heavy absorber in the infrared region of the spectrum and must usually be removed from the material to be analysed. (Recent work in the near infrared region with special instrumentation shows a great deal of promise in water solution analysis). Also, extremely large and heavy molecules tend to exhibit general infrared absorption rather than sharp and distinct bands making it difficult to distinguish between similar molecules. The third major limitation is the fact that the composite spectrum of a mixture with a dozen or more components may be too complicated to break down into the spectra of the individual components. If a given mixture can be separated into several smaller ones, however, the analysis of each one may provide the complete picture.

There is one further limitation that is peculiar to the cosmetic industry: because there has been relatively little work published in this field there is a shortage of infrared spectra of pure cosmetic materials. With the growing interest in this method of analysis, one of the scientific groups might well follow the example of the American Petroleum Institute and undertake a program that would make such spectra available as refer-

ence standards.

At present there are about 1500 infrared spectrometers in use in this country, but only about a dozen of them are to be found in laboratories associated with the production of cosmetic products. However, those who have the instruments have ample opportunity to use them. And those who don't might find that the acquisition of an infrared spectrometer would take the place of that needed but unavailable extra chemist.

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Making Executives

 Γ HE wise executive is on the lookout for men who can relieve him of detail, fill in for him when he is absent, and contribute to constructive planning.

When a department ceases to function efficiently in the manager's absence, management is bad. Every head of a department ought to be able to leave his desk, even in times of crisis. If he can't, he hasn't the right kind of men working for him, or he has kept them too much in leading strings.-Royal Bank of Canada.

Inflation is only a drop in the buck.-The Item.

Modern Door to Door Selling

THE growing sales volume in cosmetics sold direct to the consumer is stirring the interest of companies in the toiletries field that have always sold through traditional jobber and retailer channels.

Now comes Harriet Hubbard Ayer with extension of a "retail home service plan" which has been quietly tested during the past two years. The retail store stays in the picture. Saleswomen take orders on door-to-door calls, then turn them over to the retailer of the customer's choice. (Customers can charge purchases, too.) Both full-time and part-time saleswomen, called "beauty consultants," are employed.

The plan was tried out first in Rochester, is under way in Washington, will be extended to Baltimore and Chicago. Three combination packages of cosmetics are offered at prices ranging from \$9.50 to \$23.50. The highest-price package has thus far turned out to be the

most popular.

Every time someone is moved to forecast the decline of direct selling, something happens to prove he is wrong. A competitive situation develops-as in toiletries now-which stimulates a new manufacturer-sponsored idea such as the Ayer plan. Or sales volume falls off to the point where the more aggressive dealers, in one industry or another, find they must go after business instead of waiting around in a sparsely-populated showroom. (Note the current comeback of the demonstration car.)

The hotter competition gets, the more activity we'll see in direct selling.-Sales Management.

The Package and Mass Selling

PACKAGING, which has created basic changes in the marketing of consumer products in America, will become an even greater factor in mass merchandising as a result of the growing trend toward "robot selling," marked by fewer and fewer clerks, who know less and less about the products they sell.

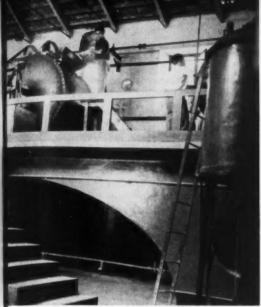
Packages can be used to spark distribution and act

as a sampling campaign at the same time.

Cited as significant package developments that have become patterns for all mass merchandising were: the introduction of toothpaste in collapsible tubes; the packaging of chocolate by Whitman's, which helped introduce cellophane and pioneered in the year-round sale of candy.

Also, the re-use packages such as food in decorated glasses, which in the instance of Kraft Foods increased sales of an item 600%; use of packages which in themselves have become trademarks, i.e., Log Cabin syrup and prince Matchabelli crown bottles; dispensing packages such as the Gillette plastic razor blade dispenser, and plastic bottles that squeeze and squirt for cosmetics and deodorants.-Arthur Bondurant.

Sixty per cent of U.S. business executives are unhappy during their first year of retirement, and about a third of them never recover felicity, according to a study of retirement problems published by the Harvard Graduate School division of research.



Production of Jasmine Concrete in Calabria, Italy. View of a rotary extractor.

A survey of the significant progress in the floral oil industry in southern Italy, Egypt, Algeria and Morocco*.

ERNEST GUENTHER, Ph.D.:

Recent Developments in the

Natural Flower Oil Industry

The Flower Oil Industry Of Southern Italy

NTIL about 25 years ago production of essential oils in Southern Italy (Sicily and adjacent Calabria on the mainland) was confined almost entirely to the important citrus oils—lemon, sweet and bitter orange, mandarin and bergamot. In fact, until about 25 years ago Southern Italy enjoyed virtually a world monopoly in the supply of citrus oils.

Recently, however, Sicily and Calabria have developed into large producers of jasmine flower oil, the total yearly production now approaching that of the Grasse region in France. The jasmine industry of Southern Italy made a modest beginning in the early twenties, but the first concretes and absolutes offered on the market were received with justified criticism; their quality was far from satisfactory. After all, the Sicilian producers had no experience in the growing of jasmine, and even less in methods of extraction. In particular, the poor quality of the solvent (petroleum ether) adversely affected the odor of the concretes and absolutes. However, in time, the necessary "know-how" was acquired, and the Italian jasmine improved greatly. Coincidentally, Southern Italy lost its monopoly as producer of orange and lemon oil to California and Florida (where these oils have now become mere byproducts in the large-scale canning of citrus juices). Profoundly affected by this change, many citrus growers in Sicily and Calabria began jasmine plantations, hoping that the production of this floral oil would bring high returns. Their efforts were supported to a large measure by the Stazione Sperimentale in Reggio Calabria, which under the able direction of Dr. Francesco La Face has given valuable technical advice to flower growers and manufacturers of concretes.

Jasmine Production in Italy

Today Southern Italy produces approximately 1,800 kilograms of jasmine concrete per year, a surprisingly large quantity in view of the short history of the industry. About 1,200 kilograms of this amount originate from Calabria (Reggio to Brancaleone), and about 600 kilograms from Sicily (Messina to Syracuse). There are quite a number of extraction plants—some modern,

Jasmine harvest in Calabria. The freshly gathered flowers are carried to the factory for extraction with volatile solvents.



 A sequel to the report on the Grasse floral products industry in the August issue.

Angust issue.

In the opinion of some leading experts in Grasse the stationary type of extractor yields concretes of finer odor, the flowers being crushed quite easily in the rotating extractors; for good results the movement of the latter should be slow.



Gathering of jasmine blossoms near Messina, Sicily.

some rather primitive—in Sicily and Calabria, most of them treating the flowers in rotary extractors.¹

Let us now briefly discuss the advantages the jasmine industry in Southern Italy enjoys over that in Southern France, Sicily and Calabria are favored by several factors:

Land suitable for the growing of jasmine is generally lower priced.

2. The same applies to labor, agricultural as well as industrial. Moreover, in Italy there is plenty of man power available. During the last (1952) harvest, labor for picking of the flowers cost only 135 Italian lira per kilogram. Based upon the dollar exchange rates prevailing at that time in Italy and France, this was only about half of what the French growers had to pay in the jasmine harvest.

3. Because of the warmer weather prevailing in Southern Italy the jasmine harvest starts much earlier than in Southern France, and lasts longer; it begins as early as June and ends by the middle of November. Winters in Southern Italy are practically free of frost. Hence the jasmine plants do not have to be grafted and hilled up in winter, as is necessary in the cooler climate of the Grasse region. This means a substantial saving in the maintenance of a jasmine field.

Disadvantages

On the other hand, the Italian jasmine industry suffers from several disadvantages:

1. In many fields the rows were originally planted too closely (only about 1.25 meters apart). This scant spacing does not permit plowing between the rows. More recently the rows have been planted 2 meters apart, which is better practice, although still insuffi-

cient for mechanical cultivation. A distance of 2.5 meters between the rows is to be preferred. As a result of close planting, all weeding must be accomplished by hand hoeing, which is unsatisfactory. Quite a number of the jasmine plantings in Southern Italy give an impression almost of neglect; the soil is hard and crusty, and full of weeds. The yield of flowers per acre is lower than it should be on a well cultivated plantation.

2. Because of lack of rain the fields must be irrigated artificially. However, irrigation water in Sicily and Calabria is expensive, which partly offsets the saving effected in harvesting.

3. Because of the employment of many children the collection of flowers is not carried out as carefully as in the Grasse region. The children are inclined to work playfully and slowly, holding the picked blossoms in their hands too long before dropping them into baskets

4. Despite the progress made in recent years, many producers in Southern Italy still have a lot to learn about proper methods of extraction. Many "knacks" are connected with this operation, for example, with rectification of the solvent, which must be carried out very carefully, so that the final concrete will not exhibit a disagreeable off-note of kerosene, elimination of which is difficult.

To summarize, jasmine production in Sicily and Calabria has increased largely during recent years, and now almost equals that of the Grasse area. For several reasons the Italian concrete can be supplied at substantially lower prices than the French product. On the other hand, the quality of the former has not yet equalled that of the latter. If the difference in quality of the Italian concrete is the result of climatic and soil conditions, not much can be done to improve it. But if the discrepancy is caused merely by inferior methods of cultivation and extraction, these can be corrected, in which case the jasmine from Grasse would be in a most difficult position. Already many perfumers in France, and elsewhere in Europe and America, have adopted the lower priced Italian product as sufficient for their purposes. However, discriminating buyers still prefer the French concrete, despite its higher price.

Oil Neroli Bigarade

Ranking next to oil of jasmine in importance is oil of neroli bigarade, distilled from the blossoms of the bitter (sour) orange tree. Potential production in Sicily and Calabria amounts to about 350 kilograms per year, but actually only from 100 to 150 kilograms are obtained. The reason is simply that growers are loath to pick the flowers. If left on the trees the latter will develop into fruit and there is a good market for brined bitter orange peel, a popular item in England. The French neroli bigarade oil is of better quality (and substantially higher priced) because in the Grasse-Golfe Juan region the blossoms are picked much more carefully than in Sicily and Calabria. Moreover, there are practically no sweet orange trees in Southern France; hence any admixture of sweet orange flowers to those of the bitter orange tree is quite impossible. The same cannot be said of Sicily and Calabria.

As regards other crops, Southern Italy is now experimenting with rose, acacia and geranium. As yet, only small quantities have been produced, but there is hope that the efforts of the Stazione Sperimentale in Reggio Calabria will be as successful as they have been with jasmine.

The Flower Oil Industry Of Northern Africa

1. Egypt

THE natural flower oil industry of Egypt had its beginning in 1912 when Charles Garnier laid out the first large plantings of jasmine and cassie (Acacia farnesiana) in El Shubra near Cairo, and erected a building equipped with rotary extractors. The jasmine shrubs are set out one meter apart, in rows spaced at 2 meters. The winters in Egypt, like those in Sicily and Calabria, are frost-free, hence jasmine does not have to be grafted and hilled up in winter, as is necessary in the Grasse region of France. Irrigation takes place with water from the Nile, through a network of canals and ditches.

Annual production of jasmine concrete in Egypt is said to amount to a few hundred pounds.

2. Algeria

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Like Egypt, Algeria offers favorable conditions for the cultivation of jasmine. Comparatively little is known about the industry, however. There is one large grower located in the fertile Mitidja Plain, producing several hundred pounds of concrete per year. He is said to be planning a substantial increase of his yearly output.

Algeria also produces a limited quantity of neroli bigarade oil, a by-product in the distillation of orange flower water, which is used by natives in North Africa for the flavoring of confectionery and baked goods.

As regards oil of geranium, Algeria reached the peak of production in 1928 with about 143,000 kilograms. Since then production has fallen off to a few thousand kilograms per year for various reasons. Land in the Mitidja Plain, which in more than one way resembles the most fertile sections of California, is being taken up by much more remunerative crops, among them tobacco, grapes for the making of wine, nut and citrus trees. Cost of land and labor in the Mitidja has become too high to permit economical production of geranium oil. Only a few geranium fields and well-established distilleries have been able to survive. Morocco, where land and labor are much lower priced, is gradually taking the place of Algeria in the production of geranium oil (see below).

3. Morocco

The growth of the essential oil industry in Morocco has been so rapid, and such a far-reaching development is taking place there, that a somewhat detailed account of the situation may be desirable.

The most important flower used in the native perfume industry of Morocco is the rose. In fact, the rose has always been the favorite flower of the Moors, who grow it in their gardens for ornamental purposes and for the making of fragrant rose water. The latter is employed as a perfume, for the flavoring of beverages and confectionery, and in old-fashioned native medicines. The rose, probably a native of Persia, was first introduced to Morocco by the Arabs, in the course of their conquest of North Africa during the seventh century A.D. The species brought along at that time may have been Rosa damascena which was planted, and since then has been extensively cultivated in oases south of the old city of Marrakesh, and especially in the famous Dadès Valley, south of the High Atlas. In the higher altitudes of Southern Morocco the rose grows very well, being quite resistant to marked changes in temperature, and particularly to drought. The dreaded 'rust," which frequently attacks rose bushes in humid or irrigated soil, is almost unknown in certain parts of Southern Morocco. For centuries caravans have brought large quantities of dried rose buds from oases

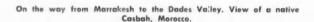


Distillation of geranium near Blida in the Mitidia Plain, Algeria. Note the small size of the stills.

in the south to Marrakesh, the center of this trade, for distribution over North Africa, and more recently also for export to France and America. Prior to World War II, Morocco produced from 400 to 750 metric tons of dried rose buds per year; one-third of this quantity was exported while two-thirds was used locally for distillation of rose water by the wealthier natives.

There has been some controversy about the taxonomy of the native Moroccan rose. Gattefossé¹ classifies it as Rosa centifolia (the species cultivated in the Grasse region of Southern France), while Begouen, the pioneer in Morocco's flower oil industry, is inclined to identify the Moroccan rose with Rosa damascena (the species cultivated in Persia and Turkey, and particularly in Bulgaria). Last year, while visiting the Dadès Valley, the principal producing area for dried roses, the author learned from Mr. Max Begouen that some years ago he had introduced a true Rosa damascena plant from Persia, and set it out in his garden in Kelaa des M' Gouna. When fully grown, this plant did not differ noticeably, botanically, from the old established rose bushes cultivated by the natives in the Dadès. It is therefore quite

¹ For details see Ernest Guenther, "The Essential Oils," Vol. V, p. 42, D. Van Nostrand Co., Inc., New York, 1950.





Nomadic Arabs still pitch their tents on the great plains of Morocco.





Production of Rose Concrete in Morocco. Inside view of an extraction building in the Dades Valley.

possible that the rose brought along by the Moors about 1,200 years ago originally was Rosa damascena, or even a more primitive parent species. However, as a result of ecological and cultural factors, the plant may have gradually undergone some morphological changes, and finally developed into a variety similar to Rosa centifolia. Moreover, it is a well-known fact that species of the genus Rosa hybridize readily—and this may have happened with the early Moroccan rose.

In the Dades Valley roses are not cultivated as special plantings, but rather between trees in the form of dense hedges around small native fields of cereals and leguminous crops, in order to keep out grazing sheep and goats. The buds are collected in March and April, before they have opened up, and are then dried in the sun. Five kilograms of fresh buds yield about 1 kilogram of dried buds. The flowers are gathered in a rather careless way by the natives, as a sort of family industry, little attention being paid to quality.

For centuries the Dades, a valley dotted with casbahs (a kind of medieval castle built of sun-baked brown mud) and inhabited by fierce Berbers, was a forbidding country visited rarely by Europeans and only at considerable risk-the land of the "Beau Geste," where patrols of the fabulous Foreign Legion fought and died. It was only in the late thirties that Europeans could stay there for any length of time, without running the danger of being ambushed and massacred. Attracted by the supply of rose flowers, two French concerns constructed two extraction plants a few years ago (on the style of native casbahs) near Kelaa des M' Gouna where a part of the available roses are now processed by extraction with volatile solvents or by distillation. The flower material employed consists of fresh, not dried, roses. In addition to some (distilled) rose oil, the two plants, in years of normal weather, produce several hundred kilograms of rose concrete. Owing to climatic conditions and the lack of care in the harvesting of the flowers (which arrive at the fac-



A snake charmer in the market place in Marrakesh, Moracco.

tories often in a faded condition) the concretes from the Dadès differ in quality from those produced in Northern Morocco (see below) or those obtained in the Grasse region. Nevertheless, the Dadès product has attained considerable importance in recent years, particularly since the Bulgarian product has become scarce. When in April of last year (1952) a sudden frost destroyed virtually the entire rose crop in the Dadès, the loss of this concrete so heavily reduced the world's total production that the concrete reached abnormally high prices.

One may reasonably ask whether manufacturers in the Dadès should not make efforts to increase rose production in this valley, for instance by starting large plantations on a modern scale. This is not feasible for the simple reason that the climate in the Dadès, dry already, appears to be getting drier. In recent years many wells have almost given out, and there is not enough water even for the most vital food crops. Many natives have already been forced to emigrate from the valley, and the French Administration, whose chief function is to protect the native tribes, will not permit the raising of industrial crops to the detriment of vital foods.

Rose Industry of Northern Morocco

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So much for the rose oil industry of *Southern* Morocco, which depends entirely upon flowers grown by natives. Let us turn now to the rose industry of *Northern* Morocco, which is based upon modern methods of agriculture in the hands of large-scale French producers. Already it has reached substantial proportions and—unforeseen events excluded—will probably increase considerably within a few years. This applies not only to rose products, but also to other floral oils, particularly that of jasmine.

During the past 25 years several attempts have been made by French concerns to cultivate roses on large plantations for extraction and distillation purposes. For

example, near Meknès many acres were planted with a variety of *Rosa centifolia*, and processed in a modern extraction building located nearby. However, virtually all these efforts failed after a number of years, because of plant diseases, insect pests and unfavorable weather conditions. As an experienced French producer told the author last year: in Morocco one can never consider a particular crop successful after only one or two years of activity. Climate is unpredictable and liable to violent changes. Ecological conditions in this newly opened country are largely unknown, and the unexpected may happen any day. It is only after about 5 years of working in a given locality that the average returns from a crop can be evaluated.

An entirely new chapter in Morocco's flower oil industry was opened about 10 years ago, when an experienced and very enterprising producer from the Grasse region of Southern France extended his activities to Morocco. In collaboration with progressive local growers, he laid out extensive plantations of rose, geranium, and jasmine in various parts of Northern Morocco, particularly near Khémisset, Tiflet, Tedders and Rabat. From every point of view this has been a remarkable development, requiring much pioneering

Laying out of extended rose plantations near Tedders, Morocco.



Scene of the native grain market in Marrakesh, Morocco.







Left: Harvest of rose flowers near Khemisset, Morocco. The freshly harvested flowers arrive at the extraction plant, Right: View of a modern flower extraction building near Khemisset, Morocco.

spirit and involving considerable risks. First of all, a long and careful search had to be made to locate the most favorable sites, offering good soil and weather conditions. Water had to be located for the establishment of artesian wells. Large tracts of land had to be plowed and planted. Selected strains of planting material had to be imported from Southern France and Algeria, and multiplied vastly for planting in the new fields. This alone required years. Reliable native labor had to be attracted and trained for a highly specialized agricultural task. Barracks had to be built for the natives, and houses for the French mechanics and engineers who were to construct and operate modern extraction batteries and large stills housed in new buildings. Mechanical farming equipment (bulldozers, tractors, harvesters, trucks, etc.) was imported from the United States. Well stocked repair shops had to be built. In short, entire centers of production-agricultural and industrial-were created out of barren plains where Arabian nomads still grazed their sheep and goats. The entire task was immensely complicated by the fact that metal equipment and materials in general were almost unavailable in North Africa during and right after the last war.

Today the visitor1 to these new floral centers cannot but be impressed by what has been accomplished during the last few years, and by the magnitude of the plans for the future.

Rose bushes are planted like grape vines in Algeria, viz., spaced 2.5 meters between the rows, and 1 meter between individual plants in the same row, which means about 4,000 plants per hectare. Use of special cultural techniques on the principles of dry farming obviates irrigation, which may cause the worst of all rose diseases-rust. One hectare yields from 2 to 3 metric tons of roses per year. The harvest lasts about 2 months-April-May-which is longer than in the Grasse region. The flowers are gathered in the early morning by a great number of native children from nearby villages. Picking roses is an easy, rather playful task for these little Arabs who are brought up under so much hardship, and the money earned means a substantial amount of cash income to them and their parents. On extraction with petroleum ether, 500 kilograms of rose flowers yield about 1 kilogram of concrete.

As regards jasmine, the plantations are also laid out along the lines followed in the vineyards of Algeria, viz., with ample spacing between the rows and plants, and using horizontal metal wires to support the shrubs, which under these circumstances attain a height of about 6 feet.2 The harvest starts as early as June and may last until the middle of December, in other words considerably longer than in Southern France. Under normal weather conditions one hectare, while at the height of productivity, may yield as much as 6 metric tons of jasmine flowers per year. The collected blossoms are trucked to the extraction plant every hour. and processed there immediately, which contributes greatly to the good quality of the Moroccan jasmine.

Inside view of a modern flower extraction building near Khemisset, Morocco

Geranium Oil

A few words now about geranium oil. Owing to the considerably lower cost of land and labor prevailing in Morocco it has always been thought that geranium oil could be produced much more advantageously in Morocco than in the overcultivated Mitidja Plain of Al-

¹ The writer is greatly indebted to Mr. Pierre Chauvet for the assistance extended to him during his survey of the Moroccan essential oil industry in 1952.

² Hid., Vol. V, p. 323 (1952).

geria (see above). For these reasons, numerous efforts were made to cultivate and distill geranium in various sections of Morocco, and limited quantities of oil were actually produced prior to World War II. These attempts were not too successful, however, chiefly because of the climatic conditions prevailing. In Morocco the summers are very hot and the geranium plants are liable to develop too much woody stem, to the detriment of leaf growth; this means a gradual decline in oil vield. Moreover, the hot weather often arrives in a sudden wave, causing the plants to flower rapidly; this requires a quick harvest of the entire field. If the plants are left standing too long, oil is lost by evaporation and resinification. Rapid harvesting, however, is still impossible on large plantations because no mechanical cutters have yet been adapted to geraniums, and the work must still be done by hand (with sickles). On large plantations there simply is not sufficient labor available to cut the entire field within 2 or 3 weeks. In the Mitidja, on the other hand, the weather is usually more favorable; the plants develop slower, and the blooming period-during which geranium must be harvested for best oil yield-lasts almost 2 months.

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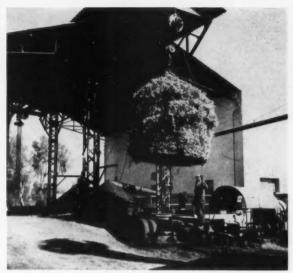
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The newest and largest geranium plantations in Morocco are those located near Tiflet and Khémisset; these were started by the same organization that developed the rose and jasmine fields described above. Selected planting material was imported from Algeria and Southern France, and set out near Khémisset. After a further selection only the best material was chosen for use in the final, large-scale plantations. Here the plants were placed 50 centimeters apart, in rows 1 meter apart-i.e., 20,000 stacks per hectare. There are two harvests per year, one in May-June, and the other in October. Two-thirds of the annual yield of oil originates from the May-June crop, and one-third from the October harvest. The cutting of the plants must still be done by hand. All other agricultural work is accomplished by means of modern mechanical equipment. In general, cultivation follows the principles of dry farming, i.e., as many light plowings as possible.

The harvested plant material is distilled immediately; otherwise the hot climate of Morocco would cause loss of oil by evaporation and resinification. Distillation is carried out in a number of large steam stills of 20,000 liters capacity, holding about 4,000 kilograms of plant material. Distillation of one charge requires 2½ hours. The stills are equipped with powerful electrically-driven hoists and other labor-saving devices.



Production of geranium oil in Morocco, View of a modern large capacity distillery near Tiflet. Exhausted plant material is lifted from

All this permits operation at much lower cost than in the small old-fashioned stills used in Algeria (ca. 600 liters capacity), which require far too much labor for charging and discharging. In Morocco (Tiflet) 1,200 kilograms of geranium plants yield about 1 kilogram of oil. One hectare of a plantation in full productivity yields approximately 20 kilograms of oil per year.¹

Moroccan geranium oil produced in Tiflet and Khémisset is of excellent quality; it exhibits a rosy odor, somewhat softer than that of the Algerian oil. Actually the fragrance of the Moroccan product resembles that of the French (Grasse) oil; the physicochemical properties those of the Algerian oil. The Moroccan oil, perhaps too delicate for use in soaps, is admirably suited for employment in cosmetics, and particularly face powders where a rose note is required as a base.

The geranium plantations near Tiflet and Khémisset are now the largest in the world, exceeding those of Algeria (those of Réunion Island consist of only small fields and patches owned by numerous grower-producers). Yearly total production of geranium oil on the Moroccan plantations already approximates that of the Algerian oil. Unexpected events aside, output of ger
Tibid., Vol. IV, p. 707 (1950).

Left: Cultivation of an extended geranium field near Tiflet, Morocco. Right: Harvesting of flowering geranium near Tiflet, Morocco. View of a modern distillery in the background.





anium in Tiflet and Khémisset should increase substantially within the next few years, and eventually exceed that of Algeria.

To complete our survey of the new flower oil industry of Northern Morocco, it may be interesting to give a short description of the various centers of production in their present state, and of the planned extensions. Even the casual visitor must be struck by the vastness and tidiness of the fields, the modernity of the centrally located distilleries and extraction plants; but even more impressive is the fact that the entire organization is in the hands of men with long agricultural and technical experience in Southern France and Northern Africa.

Centers of Production

These are the centers of production:

1. Khémisset, on the highway between Rabat and Meknes. This property comprises about 675 acres, 125 of which are planted with geranium, 110 with rose, 40 with jasmine, the balance with tuberose, jonquil, cereals and various other crops. The extraction plant houses three batteries; the installation of a fourth is planned. A boiler house, mechanical workshops, water pumps for irrigation, offices and living quarters for the personnel complete the unit.

2. Tiflet, about 15 miles west of Khémisset, on the highway to Rabat. This property comprises altogether about 1,000 acres. Of this 500 are in geranium, already in full production; another 250 have been planted with geranium, still in the developing stage. The balance of the property (250 acres) is gradually being planted with *Eucalyptus citriodora*. The large distillery houses 4 steam stills, each of 20,000 liters capacity. As in Khémisset, there are a boiler house, mechanical workshop, irrigation pumps, garages for tractors, and living quarters.

3. Tedders, about 30 miles southeast of Khémisset. Here an entirely new "Valley of Roses" is being created, which will some day be one of the world's largest producers of (extracted) concrete and (distilled) oil of rose. The entire property consists of three farms, of which some 550 acres have recently been planted with Rosa centifolia. Another 500 acres will be planted with the same flower as soon as conditions permit. Tractors are used for cultivation of the vast fields. The construction of a distillery with 8 to 10 special stills adapted to rose oil production is planned. For the preparation of concrete the flower material will be trucked to the extraction plant in nearby Khémisset.

Other centers of production, but less important, are being created on the Atlantic coast, near Rabat and near Port Lyautey. Owing to the proximity of the ocean, the climate here is mild for most of the year. About 100 acres have been planted with jasmine, but they are not yet in full yield. The flowers are trucked to the extraction plant in Khémisset, but to eliminate transportation problems plans have been made to construct an extraction building with two batteries near Rabat. This will permit treatment of the flower material immediately after picking, and result in a marked improvement of the concrete.

Production of concretes of jasmine and rose on the various properties described above is already substantial; in 1953 it will amount to several hundred kilograms of rose concrete and jasmine concrete. Precise

predictions for the future cannot be made as developments will depend greatly upon several factors, among them climatic conditions and the ever present danger of plant diseases, insect pests, etc. As was pointed out above, the unexpected can always happen in newly developed Morocco. If everything goes according to plans approximately 800 kilograms of jasmine concrete may be produced in two years. At that time production of rose flowers will amount to about 1,200,000 kilograms. Transformed exclusively into concrete this would mean more than 3,000 kilograms, but it is planned to use a good portion of the rose flower material for the distillation of rose oil. As regards geranium, approximately 4,000 kilograms of oil and a few thousand kilograms of concrete will be produced. Moreover, there will be small quantities of tuberose, jonquil, and a few other flower oils.

The whole enterprise involves a great deal of risk and real pioneering. But nothing has ever been accomplished in a new agricultural territory without daring and a spirit of adventure: the opening up of the great American West is perhaps the most striking example of this.

Story of an "Expense Account"

	-		
May	1	Want-ad for secretary	2.00
,	2	Violets for new secretary	1.50
		Week's salary for secretary	50.00
	9	Roses for secretary	4.50
		Candy for wife	1.40
		Lunch with secretary	9.75
		Week's salary for secretary	60,00
		Movies-myself and wife	2.00
		Theater tickets-myself and secretary	9.60
	19	Candy for wife	1.40
		Lillian's salary	75.00
		Dinner and show with Lillian	28.75
	22	Fur coat for wife	1875.00
		Want ad for male secretary	2.00

Sometimes very able men seem to forget that other men also are able.—R. L. Evans.

Cosmetic Excise Tax Collections

COSMETIC excise tax collections for the years of 1951 and 1952 and also the collections for the months of 1953 so far issued are given in the table following:

romon m. n.			
	1953	1952	1951
January	\$13,123,480	\$11,547,853	\$12,255,363
February	13,859,961	14,338,420	12,867,842
March	7,805,077	7,248,879	8,534,569
April	9,236,101	8,218,865	5,746,348
May	9,286,470	9,174,622	9,293,461
June	8,875,000	8,253,649	8,622,275
July		9,357,443	8,901,311
August		8,849,488	10,252,706
September		8,523,241	7,698,854
October		8,439,370	9,365,932
November		7,878,976	8,916,488
December		10,432,117	8,974,245



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H. GOLDSCHMIEDT, Ph.D., M. W. METTENLEITER, M.D. and E. G. KUEHNS, Chem. Eng.

Use of Sea Water in Cosmetics

E must believe life began in the sea. In its depths the earliest living things found a friendly home. From the beginning the electrolytes of the sea water entered into intimate contact with the surfaces of these living cells and bodies and greatly influenced their vital functions. Indeed the whole early course of organic evolution must have been largely determined by the basic properties of sea water.

Major Constituents

The major constituents of sea water (as analysed by H. W. Harvey¹) are approximately Sodium 30.4%, Magnesium 3.7%, Calcium 1.16%, Potassium 1.1%, Strontium 0.04%, Chlorine 55.2%, Sulfate 7.7%, Bromine 0.19%, H₃BO₃ 0.07%, Carbonic Acid and Carbon Dioxide 0.35%. In sea water the carbon dioxide is

mostly in the form of bicarbonate. The boron in sea water exists as boric acid. Some sea plants are rich in boron, their ash being stated to contain 1% boron trioxide.

Minor Constituents

The minor constituents have also been determined by Harvey. The total sum of these probably does not exceed 0.025% of the major constituents. Some of these trace elements have a known function in the organism.

The following list shows the trace elements in milligrams per cubic meter of water. The amount depends on location and season.

Fluorine Aluminum milligram per cubic meter 1300-1400 1800-1900



Sea water can stimulate the effectiveness of bubble baths and other cosmetic preparations.

Lithium	100
Iodine	50
Barium	50
Rubidium	20
Arsenic (as arsenite)	7-24
Copper	5-11
Zinc	8-14
Lead	4-5
Selenium	4
Tin	3
Caesium	ca. 2
Uranium	0.15-0.16
Manganese	1-10
Thorium	ca. 0.5
Vanadium	0.2-0.3
Molybdenum	0.3-0.7
Gallium	0.5
Cobalt	0.1
Nickel	0.1-0.5
Bismuth	0.2
Cerium	0.4
Scandium	0.4
Lanthanum	0.3
Yttrium	0.3
Mercury	0.3
Silver	0.15 - 0.3
Gold	0.004-0.008
Iron	ca. 10
Carbon	1200-2000
Silica	1250-2000
Nitrogen	200-600
Phosphorus	1-60

Ions of Blood and Sea Water

Now we have to examine more carefully the exact composition of the inorganic salts of sea water, as compared with that of blood. The total salt content of the blood of the higher animals is far below that found in sea water. As per research by William H. Amberson², however, even in land animals there is a remarkable similarity between the ratios of the inorganic cations in blood and in sea water. If for each fluid we set sodium equal to 100, we then arrive at the ratios shown in Table 1 for the cations in our own blood plasma and sea water. These ratios strongly support the view that our own blood, in its cation content at least, is related to sea water.

Table 1.

	Blood Plasma	Sea Water
Sodium	100.0	100.0
Calcium	3.3	2.3

When we turn to the inorganic anions we find that the resemblance between blood and sea water is much less close. The following ratios shown in Table 2 have been determined, when the chloride value of both fluids are set at 100.

In both fluids chloride preponderates, but there is little other resemblance. The high content of bicarbonate in plasma is caused by the constant production in the body of carbon dioxide. Some of this dissolved gas unites with various cations to form the bicarbonates, which, as we shall shortly see, are of prime importance in regulating the hydrogen ion concentration of the

Table 2.

	Blood Plasma	Sea Water
Chloride	100.00	100.00
Sulfate	Trace	14.00
Bicarbonate	30-40	1.00

Trace Elements of Minor Constituents

The first great active interest in trace elements was shown by investigators at the University of Wisconsin and at the Department of Agriculture in Washington, especially after it was found that certain severe blood diseases in animals were due to the deficiency of trace metals, such as copper, cobalt, nickel, zinc, manganese, and others. Some soils in the United States do not contain enough of one or more of these essential trace elements, and nutrition-deficiency diseases result where animals feed on plants grown on deficient soils.

The question frequently raised not long ago, as to whether all these small quantities of different elements are of significance medically, has been answered by able scientists more and more in favor of the importance of the trace elements. Today their basic effects, both individually and collectively, cannot be doubted any longer. Oskar Baudisch^a states in his publication that it has been known for a long time that the health of the population in large cities depends on one part of iodine per twenty-five million parts of water. Iodine is the classical trace element of whose value even the general public has been conscious for many years.

Iron: Second to iodine in this respect is iron. The

living cell contains very small amounts of iron, namely one gram of iron per 10 million grams of cell-substance. Red blood corpuscles contain much more iron, about 500 mg of iron per kilo of blood.

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Cobalt: Sheep and cattle deficient in cobalt show symptoms of anemia, cachexia, loss of appetite, changes in muscles, liver and spleen. They recover if minimal amounts of cobalt are added to the forage (0.03 to 0.1 mg for the sheep and 0.3 to 1 mg for the cattle, daily). Cobalt exists in minute amounts in sea water, but despite this fact it is always detectable in marine animals. Cobalt is also a component of Vitamin B₁₃.

Manganese: Manganese is a constituent of the enzyme arginase, which splits arginine into ornithin and urea.

Zinc: Zinc is a part of the enzyme carbonic-anhydrase. Carbonic-anhydrase has a most important function in the lungs and in other organs. Zinc is also of importance for the insulin producing function of the pancreatic gland.

Aluminum: Aluminum is a constituent of the succinic-oxydase enzyme system which is important in sugar metabolism.

Magnesium: Magnesium is a constituent of the enzyme phosphatase, which has an important function in phosphate metabolism. Carboxylase, an enzyme which splits keto-acids, contains magnesium.

Fluorine: Fluorine in a concentration of one part per million helps to prevent the development of caries of the teeth.

We know that the mineral elements in the body are constantly replaced by other or new ones supplied from food and water. It is apparent that each single mineral element has its function in life and also, in fact, that the antagonism and synergism of the elements make life possible. The most obvious instance of biological antagonism can be seen in the mutual relation of calcium and potassium (heart beat) and of calcium and magnesium (muscle activity). Calcium and iron stand in mutual relationship concerning anemia. The entire human skeleton is continuously being rebuilt, and calcium is one of the important building materials which must be supplied in sufficient amounts. Calcium assimilation is only one small part of the whole complicated problem and transmineralization of the body by the intake of essential materials.

Concerning the utilization of trace elements, it must be confessed that we are still far from being able to make concrete statements, but they are certainly of additional therapeutic value. There can be no doubt that all the small amounts of numerous elements present in sea water or in the soil must have entered the life-complex genetically and become essential parts of living tissues. If nature puts so much stress on her inventive power in linking metallic ions to the organic structure of living matter, they certainly must be of paramount importance for life in general.

History of Sea Water Therapy

The old Greek and Roman practitioners administered sea water as a laxative and used it in skin diseases. There are a few statements in Hippocrates as to the effectiveness of its external application in the form of showers and effusions. Plinius, Avicenna and later Savonarola made reference to the therapeutic use of sea

Properly employed, sea water may stimulate the effectiveness of bubble baths, facial masks, anti-perspirant lotions, etc.

water. Richard Russel around 1750 advocated in England sea bathing as a form of treatment. In 1791 the Royal Sea Bathing Hospital was founded in Margate, England, for therapeutic ocean bathing. The founding fathers of Thalasso therapy (sea water therapy) were led in Europe by Barellai of Italy, Petrochaud of France and Benecke of Germany. In recent years Haeberlin, Kestner. Krauel, Schaede and their co-workers in Germany made further development in sea water therapy.

Therapy

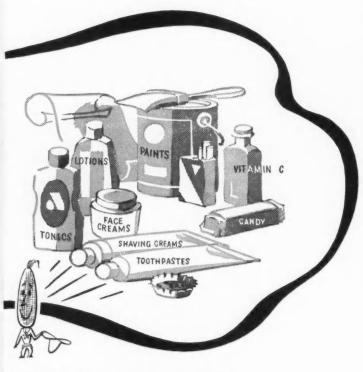
Sea water may be classified on the basis of its natural mineral constituents, such as the saline and bicarbonate salts in which the sodium, potassium, calcium and magnesium are the principal cations. The saline groups, sulfate and chloride, are both present, also carbonate and bicarbonate as the anion radicals.

Also gases appear with relative frequency. These are considered of definite therapeutic importance, especially hydrogen sulfide and carbon dioxide. Their influence in the course of treatment will depend largely on the amount of the gas present and the method of administration.

The astringent effect of sea water may be used to good advantage.



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The chemical influence of these agents on the patient when bathing in the water depend largely on the gases which were mentioned above. Carbon dioxide is absorbed through the skin from the bath and is eliminated through the lungs in greater than the usual amount. It is also possible for other constituents, such as iodine, bromine and boron, to be absorbed through the skin in small amounts from the bath water.

B. I. Hayley⁴ described the tonic effect of salt in sea water on the skin. Sea salt dissolved in distilled water lacks some of the properties of natural sea water by losing carbon dioxide. Sea water has a decided stimulating effect upon the skin and the nerve endings. But sea water with low temperature is less favorable to easy absorption as naturally the pores of the skin are contracted. J. Robenson Day⁵ also recommended sea water bathing or injections with sea water. The cutaneous system derives benefits from sea water treatments. Pruritus is relieved and soon ceases. Cases of ichthyosis improve. Unhealthy skins which never perspired recover their function and the sebaceous and sweat glands secrete normally. Nails, which have been ribbed, cracked or brittle, become normal again.

For a long time people have been using sea water as a laxative and many old seamen claim that they owe their health to a daily drink of it. Sterilized sea water is also used as a dressing for wounds and it is claimed that wounds of fishermen never get infected. Arnold Hiller⁶ applied sea water therapy successfully in the following:

1. In convalescence, sea water baths speed the re-

2. In neurasthenia and hysteria a half hour daily bath in lukewarm sea water is effective.

3. In sciatica the treatment consists of hot sea water bathing with a following massage.

Leo Stone⁷ also sees benefit from all elements in sea water by daily drinking of sea water. He recommends about 30 cc, diluted with tapwater, preferably in the form of lemonade.

Conclusions

Sea water therapy consists of:

- 1. Isotonic sea water injections.
- 2. Inhalation of sea water.
- 3. Drinking of potable sea water.

Sea Water Cosmetic Use

This consists of:

- 1. Bathing in brine or concentrated sea water.
- 2. Bathing in cold or heated sea water.
- 3. Baths and packs with sea mud. (Liman)

The primary interest of our readers is naturally directed toward the field of cosmetics, and here too, sea water is found to have a useful application. We have discussed the therapeutic aspect at some length because of the fact that the beneficial cosmetic effect is achieved on an essentially therapeutic basis. This means that the favorable results are not merely transient and superficial but result from a general tonic effect and are correspondingly more permanent.

According to the composition of sea water described above, and the observations of interested physicians, the minor constituents play an important role. Furthermore, in treating flaccid, prematurely aged or anemic skin, the astringent effect of sea water is also of great cosmetic value.

In suitable combination with standard cosmetic media, such as bubble baths, facial packs, antiperspirant lotions and the like, in formulations developed by experienced research, sea water can considerably stimulate the effectiveness of such beauty products. This desirable result is achieved in two ways: by preventing the development of minor harmful conditions and by contributing to their elimination if already present.

This application is especially indicated in view of the fact that many people have no ready access to the ocean and that sea bathing is seasonably limited. Consequently, it would appear that a profitable and useful new field is offered to the cosmetic industry for exploitation. In France this has already been appreciated as indicated by the fact that a patent was recently granted there for formulating creams and lotions with sea water.

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 Chemical and Engineering News-July 17, 1950

Those who do little have plenty of time to talk about all of the things they are going to do.—Phoenix Flame.



"I don't care whether my lipstick does or does not leave tell-tale marks—I don't go around kissing men!"



THE PURSE SIZE FLACON THAT CHANGED THE PERFUME MERCHANDISING OF A NATION!

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2. Perfume carried daily in Spillproof purse size flacons is on your customer's dresser. Spillproof purse size flacons is perfumes left 3. The convenient size and lower unit price of perfumes in specific sizes entice your woman customer to carry Spillproof purse size and lower unit price of perfumes in and use both "day" and "evening" perfumes, boosting con.

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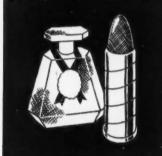
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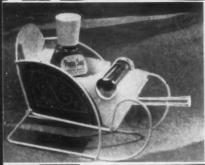
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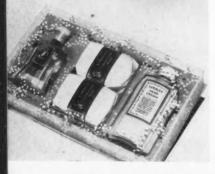
Let Orbis solve your perfume problems











Christmas

Packaging

Top left:
POND'S Dreamflower Dusting Powder in green and red gift carton sells for the regular price of 89 cents.

Left:
PEGGY SAGE Crystallin Finish Polish and
Stay Sheen Lipstick, together in a gay
sleigh, sells for \$2.00.

Right:
ALFRED D. MCKELVY CO. present Black
Watch men's toiletries. The combination
set of 6 oz. bottles of shave lotion and
cologne shown sells for \$5.00.

Left: SEAFORTH Dress Parade gift package contains shaving soap, shave lotion, cologne, and talc in a red and gold gift box at \$4.10.

Right:
REVLON'S Small fry package contains a make-up story-book in verse, "natural" lipstick, face powder, and Aquamarine Mist and Hand Lotion. The price: \$2.50.

PRINCE MATCHABELLI'S Cologne Carols holds two one-ounce flasks of Potpourri and Rose colognes in a doll-house. The price is \$1.00.

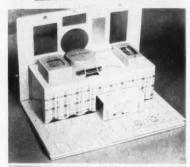
Left:
DERMETICS' Holiday Case is a pink satinlined velvety black case holding a Place & Show Compact, and with a lipstick in the handle. In pink and white gift box it sells for \$2.95.

Right: SHULTON, Inc.'s Friendship's Garden Liquid Petals blue cream perfume in a flower decorated acetate encased stand-up package sells for \$1.25.

Left: YARDLEY'S English Lavender snowspeckled acetate box contains two cakes of soap and hand cream. It sells for \$3.75.









200 September, 1953

The American Perfumer

and Promotions





RICHARD HUDNUT gift set holds Cologne for Men and Shaving Lotion. The package retails for \$2.00.



DUBARRY Beauty in Fashion Kit is a moirelined honey alligator grain and holds creams, lotions and make-up. It sells for \$10.00.



Right:

MARY CHESS' Golden Court contains five perfumes, each in a different chesspiece miniature bottle, such as a king, queen, etc. Price: \$5.00.



Left:

COURTLEY'S One for the Road travel kit holds Men's Cologne, Body Powder, After Shave, and Shave Cream. It sells for \$3.75.



TUSSY'S Jewel Trio, consisting of Midnight Perfume Vial, Compact, and permastick Lipstick in black satin gold-trimmed case sells for \$8.50.



Left:

HELENA RUBINSTEIN'S Bath Foam Domes package contains four billiard ballshaped Bath Foam Domes, four to a package, each in a different scent. The quartet sells for \$1.25.



HARRIET HUBBARD AYER'S Golden Chance Cologne Candle is a cologne bottle in a candle sleeve. A 2 oz. bottle is \$1.25; the 4 oz. one sells for \$1.75.



LENTHERIC's styrofoam Sno-Mitten holds a plastic squeeze bottle of Cream Sachet perfume with net trim. It lists for \$1.75.



CUTEX's miniature suitcase contains a complete manicure set plus a matching Stay Fast Lipstick, in hand-bag type case. The price is \$2.50.





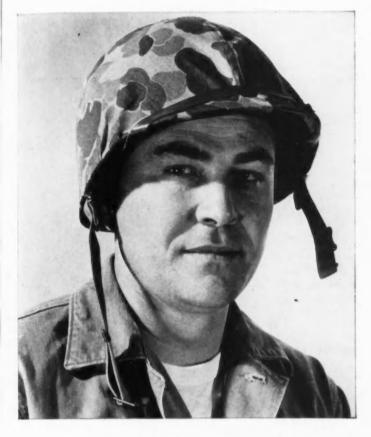






& Essential Oil Review





Technical Sergeant
Robert S. Kennemore, USMC
Medal of Honor



Under His Foot, the Live Grenade

THE MACHINE GUN belonged to E Company, Second Battalion, Seventh Marines. It was under the command of Technical Sergeant Robert Sidney Kennemore.

It was busy. For on this November night fanatical Red masses were swamping Marine defense positions north of Yudam-ni.

Fighting was close and desperate. Fifteen yards in front of the gun, a Red soldier raised his body briefly and sent a grenade into the air. It landed squarely among the crew. In a split second, Sergeant Kennemore had covered it with his foot.

There was a violent, muffled explosion, but not a man was hurt. Not a man except Sergeant Kennemore. He had given both his legs to save his comrades' lives.

"When I was on active duty," says Sergeant Kennemore, "I sometimes wondered if people back home cared as much about stopping Reds as we did. Now that I'm a civilian, I know they do. And one proof is that so many of my neighbors are investing in E Bonds for our country's defense. Believe me, I know how important that defense is. So I'm investing, too, just as I hope you are!"

Now E Bonds pay 3%! Now, improved Series E Bonds start paying interest after 6 months. And average 3% interest, compounded semiannually when held to maturity. Also, all maturing E Bonds automatically go on earning—at the new rate—for 10 more years. Today, start investing in U. S. Series E Defense Bonds through the Payroll Savings Plan; you can sign up to save as little as \$2.00 a payday if you wish.

Peace is for the strong! For peace and prosperity save with U. S. Defense Bonds!

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PERFUMERY SPECIALTIES - ESSENTIAL OILS - AROMATIC CHEMICALS

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REVLON'S miniature metal lantern, ideal for hanging on the Christmas tree, contains a Non-Smear type lipstick. It retails for \$1.25.

Right:

LENTHERIC'S Hobby Horse, made of pink snow polystyrene, with bell dangling from his halter, carries a dual gift of perfume purse flacons in his saddle. Featured are one dram of Tweed and one dram of Miracle perfume. The price: \$5.00. Len-theric's Fresh-Up Kit is a plastic case hold-ing four 2-ounce plastic bottles of Debo deodorant, Clean Up, Night Work and Sheer Beauty Hand Lotion Concentrate. Its price: \$3.00.



MAX FACTOR offers a double picture frame holding Creme Puff, the combination make-up base and powder, and Color-fast lipstick. Three shade combinations are available. The price is \$2.35.

Right:

YARDLEY offers a trio of Bond Street products in a gift package. Perfume, toilet water, dusting powder and sachet are set in a white, satin-lined box priced at \$8.75.

Left:

HELENA RUBINSTEIN offers a jeweled Compact, in any of six make-up shades, at \$3.00, and a Jeweled Stay-Long Lipstick, in any of 14 shades, at \$2.00, in gift packages. Both items are also available together in a single box at \$5.00.

Right: wristey's Antique Cologne, in crackle bottles, sell for \$1.00. Also available, but not shown, are floral toilet water, bubble bath and talc, boxed together, in assorted fragrances, at \$2.50. Still another Christmas gift item is a Candy Jar Bubble Bath bottle, at \$2.00.

BOURJOIS' Arc de Triomphe package displays its Evening in Paris perfume. It retails for \$1.00.

GOURIELLI'S Here's How Shave Finish contains 4 ozs. of After Shave Lotion in a contoured bottle, pinched towards the base to fit the hand, and 4 ozs. of Talc in a plastic bottle, together in a black patent leather box lined and lettered in silver. Price: \$3.00.









When men make a hit with it



Norda helps

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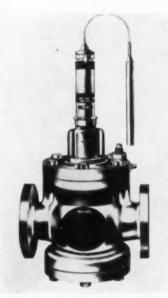
Leading perfume makers depend on Norda. Many a subtly blended fragrance and alluring, elusive odor have Norda knowledge to thank.

Experience, care, and very great pride are advantages Norda offers. Norda has always made good selling scents. Send for free Norda samples today.

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Hints for Improving Production



Pilot-operated temperature regulator

New Temperature Regulators

Self operating temperature regulators designed as type V1000 direct acting for heating applications and VR1000 reverse acting for cooling are announced by the Farris Stacon Corp. They are compact, self contained pilot operated regulators developed to incorporate design simplicity and the advantages of the liquid expansion principle in the larger size valves.

Vacuum Plating Process

A new vacuum plating process for glass or plastic closures or containers is announced by the Richford Corp., 251 Fourth Ave., New York, N. Y. This process is stated to duplicate gold or silver finishes at a fraction of the cost of metal closures or containers. Test runs were subjected to acid, alkali, immersion, fading and abrasion and in every case the company reports the new process came through either equal to or superior to metal.

New Tanks for Storage

New standard tanks for storage of materials at atmospheric or low pressures are announced by the Aluminum Co. of America. The tanks are offered in capacities ranging from 5800 to 16,400 gallons and

are of both horizontal and vertical types. All are 19 ft. in diameter and are made of ¼ in. welded aluminum alloy.

Fragrant Mist Atomizers

For creating a perfumed air throughout the cosmetic department of stores and for similar use otherwise fragrant mist atomizers are offered by Walton Laboratories Inc. The perfume is injected into the air by a mechanical process of a centrifugal force; and because of this principle of operation it is stated the scent is held in suspension and carried by the air. No parts are exposed.

Additive for Rubbing Alcohol

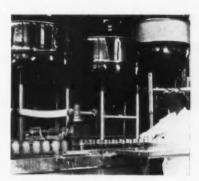
A new ingredient called Terinal has been developed by Drug Brands Inc. in conjunction with E. I. duPont de Nemours & Co, and has been incorporated into the former's rubbing alcohol Purex Plus. Terinal, which is alcohol soluble, is being tested by four large manufacturers who are considering the commercial exploitation of it as an additive for cosmetics, soaps, shampoos, detergents etc. The tests may prove it to be an effective ingredient as a skin softener.

Base for Detergents

A new line of bases for scenting liquid and powder detergents known as Deteromes, has been developed by Dodge & Olcott Inc., 180 Varick St., New York 14, N. Y. The company states that they have been designed to withstand unusually high temperatures of manufacturing processes and to mask even the most tenacious odor of the petroleum base frequently used in synthetic detergents. The bases are available in different fragrances.

Automatic Filling Machine

A new automatic filling machine for handling 15 different style bottles offered by F. L. Burt Co. handles the entire filling of 20 to 60 containers per minute with one operator according to the company. It is used for jars, cans, squeeze bottles and tubes and fills soft soap, paste, waxes, cosmetics and other liquid or soft substances. A product



Automatic filling machine

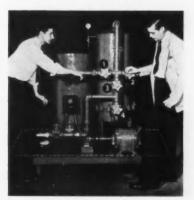
may be fed to the head of the filler direct from kettles or hoppers.

Protection Against Glare

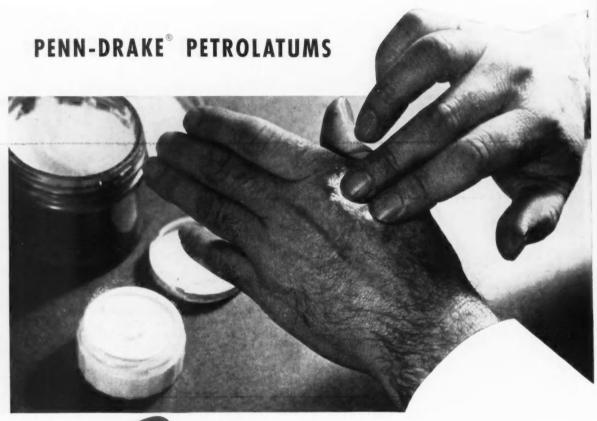
A new simple method to provide protection against solar heat, glare and ultra violet rays is to spray windowpanes with thermoglare plastic film according to Eastern Industrial Services Inc. It is available in three scientifically balanced colors and one application with a spray gun is stated to be sufficient to coat the window for years as the film is weather resistant.

Space Saving Filters

To reduce the amount of floor space required, Titeflex Inc. announces that its line has been redesigned. In the illustration the dotted lines show the space required by former filters of the same capacity. Convenient location of motors, pumps and valves are also pointed out. Control valves numbered are 1, recirculation; 2, inlet; 3, backwash valve and 4, inlet valve.



Redesigned Titeflex filter



Proved Right By Tests You Can't Define

At Penn-Drake uniformity is a key word. Much of our productive effort is devoted to assuring our customers of perfect uniformity in the petrolatums they order. Matching physical specifications is one thing, a relatively easy thing; for every scientific test is made to insure uniformity of viscosity, melting point, color, penetration and other properties.

Satisfying the touch and the eye of the expert is more difficult, for what he is after—a certain indefinable texture, a certain appearance—cannot be measured in scientific terms. Yet, Penn-Drake has earned a reputation for doing just that: satisfying the touch

and eye of the expert in addition to matching physical specifications exactly. Among the most pleasant words we hear are: "Yes, the appearance is exactly right."

Penn-Drake Petrolatums are carefully refined from 100% pure Pennsylvania crude stocks. They are free from odor, taste, rancidity and impurities which may cause deterioration with age. They are stable in every respect and are supplied in all grades and colors from Super White to Dark Green. We will be glad to send you samples of standard grades, and can provide special grades if your product requires them.

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MAKERS OF: White Oils (U.S.P., N.F. and Technical); Petrolatums (all grades and colors); INSECTI-SOL and SUPER-SOL (deaderized insecticide bases); Deaderized and other Naphthas; Petroleum Sulfanates, Waxes; Industrial and Motor Lubricants and Greases; Fuel Oils, and other petroleum product;



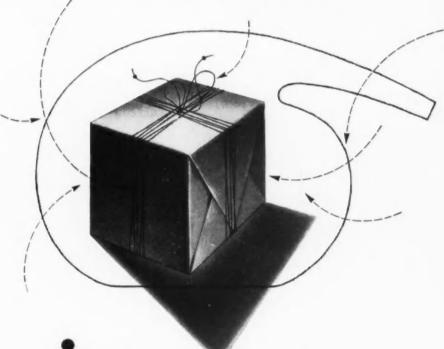
THE new aromatic chemical musk-tonkin type lasting, economical

Useful addition to present standard fixatives

Does not discolor perfumes, creams, soaps, and other cosmetic preparations

Like a string around a package, it...

HOLDS THE PERFUME TOGETHER



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NO

Polak's Frutal Works, Inc., Middletown, New York

*Domestic and Foreign Patents applied for.

Selected Book List

THE ESSENTIAL OILS, VOL. I. By Ernest Guenther, Ph.D. Covers (1) The Origin and Development of the Essential Oil Industry; (2) The Chemistry and Function of Essential Oils in Plant Life; (3) The Products of Essential Oils: Methods of Distillation, Enfleurage, Maceration and Extraction with Volatile Solvents: (a) Distillation of Essential Oils, (b) Natural Flower Oils, (c) Concentrated, Terpenless and Sesquiterpenless Oils; (4) The Examination and analysis of Essential Oils, Synthetics and Isolates. Indispensable for up-to-date information on the chemistry, production, and analysis of essential oils. 448 pp. \$7.50 postpaid.

THE ESSENTIAL OILS, VOL. II. By Ernest Guenther, Ph.D. This second volume gives data on several hundred of the more important constituents of essential oils. Describes the structural formulas, occurrence, methods of isolation and identification, the physico-chemical properties of these compounds. Essential oil constituents grouped according to the class of compound to which they belong: Hydrocarbons, Alcohols, Esters, Kezones, Lactones, etc. Maison G. De Navarre says: "In no other work is the treatment of essential oil constituents so complete and up-to-date." 852 pages, illustrated and indexed. \$12.00 postpaid.

THE ESSENTIAL OILS, VOL. III. By Ernest Guenther, Ph.D. First of the monograph series, describing the oils of the plant families Rutaceae (with special emphasis on the very important citrus oils) and Labiatae. Discusses individual oils, their botanical and geographical origin, methods of cultivation. Techniques of distillation and yield of oil, their physico-chemical properties, chemical composition, total production, and uses in industry. Author has integrated results of field work, laboratory, and literature. Work of hundreds of prominent scientists has been carefully screened and edited for your use in this outstanding series. 777 pages, illustrated and indexed. \$12.00 postpaid.

THE ESSENTIAL OILS, VOL. IV. By Ernest Guenther, Ph.D. In continuing the series on "The Essential Oils," the present book consists of monographs on individual oils arranged according to a botanical system, six families of which are covered by the present volume. In addition, a number of chapters have been written by specialists in their field. Each monograph is an encyclopedia on the subject, dealing with every scientific, economic and political aspect associated with the oil. You'll want this latest volume of this important series. 752 pages, illustrated and indexed. \$12.00 postpaid.

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THE ESSENTIAL OILS, VOL. VI. By Ernest Guenther, Ph.D. This is the final volume in Dr. Guenther's series. Composed of monographs of interest to the pharmaceutical, flavor, and perfume industries, it features wintergreen, sweet birch, valerian, mustard, onion, hops, etc. It also deals with pine oils and turpentine. A table showing the taxonomic classification of all the estatement.

sential oils described in all six volumes is included at the close of this volume. 481 pages, illustrated and indexed. \$12.00 post-paid.

SYNTHETIC FOOD ADJUNCTS. By Morris B. Jacobs, Senior Chemist, Chief of the Chemical Bureau of Foods & Drugs, Dept. of Health, City of New York. Comprehensive handbook of information needed to make and use the colors, flavors and other synthetic adjuncts employed in the food industries. Full directions for their mixing, blending and formulation from the many hundreds of individual chemical compounds that enter into food production—including flavoring substances, coloring matters, vitamins, vitagens, preservatives, antioxidants, stabilizers, emulsifiers, etc. 335 pages. \$7.50 postpaid.

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PERFUMERY SYNTHETICS AND ISOLATES. By Paul Z. Bedoukian, Ph.D. This carefully compiled volume supplies a genuinely felt want for authoritative data on perfumery synthetics. The work contains the history, chemistry, physical and chemical properties, manufacture, uses, and other pertinent data of the principal perfumery compounds; and covers the important perfumery synthetics. A complete index adds to the value of this useful book. 488 pages, \$8.50 postpaid.

MODERN COSMETICOLOGY. By Ralph G. Harry, Partial contents: Emulsions, Cleansing Creams, Milks and Lotions. Acid Creams, Face Packs and Masks, Mud Creams, Vanishing Creams, Powder Creams, Lubricating Creams. Astringents and Skin Tonics. Lipstick. Make-up. Face Powders. Sunburn and Suntan Preparations. Deodorants. Depilatories. Antioxidants. Bath Preparations. Bath Oils and Emulsions. Foam Baths. Hand Creams and Lotions, Dental Preparations. Mouthwashes. Shaving Preparations. Hair Tonics and Lotions. Hair Creams and Fixatives. Permanent Waving Solutions. Hair Setting Lotions and Hair Lacquers. Hair Shampoos and Soapless Detergents. Manicure Preparations, Eye Lotions. Baby Preparations. Foot Preparations. Insect-Bite Preparations. Humectants. Acne Preparations. Coloring of Cosmetic and Toilet Preparations. 514 pp. \$12.00 postpaid.

MODERN COSMETICS. By E. G. Thomssen. Contents: Cosmetic Classification, Face Powder, Creams, Lotions, Deodorants, Bath Preparations, Make-up Preparations, Rouges, Eye Preparations, Lipsticks, Suntan Preparations, Hair Preparations, Hair Waving Preparations, Shaving Media, Dentifrices, Miscellaneous Cosmetics, Perfumes, Machinery and Equipment for Cosmetics, Packaging Equipment and Factory Layout. 644 pp. \$8.00 post-paid.

NATURAL PERFUME MATERIALS. By Y. R. Naves and G. Mazuyer. Describes the raw materials used in the extraction, choice, purification and recovery of volatile solvents; the preparation of tinctures and infusions; the treatment of concretes; resins and balsams; the extraction of the aromas of fruits and distilled flower waters; the manufacture of pomade and perfumed oils by the use of vegetable and animal fats and mineral oils, properly chosen and prepared; the processes of digestion and enfleurage on solid and liquid absorbents; and the extraction of decolorized absolutes and pomades from the diffused products. Contains much information on the chemical composition and analytical examination of extraction products; descriptions of plant and raw materials subjected to extraction. 355 pp. \$7.50 postpaid.

When ordering send check or money order to

MOORE PUBLISHING CO., Book Dept.

48 WEST 38th., ST., NEW YORK 18, N. Y.



NEW PACKAGING and PROMOTIONS

HAZEL BISHOP is shipping its new long-lasting nail polish, said to stay on three to five days longer than any other, and which is claimed to withstand soap, detergents, and water. It comes in any of nine shades, retailing for 60 cents, and in two irridescent shades, at 75 cents. An introductory counter display holds two dozen bottles. The polish is backed by a million dollar advertising budget. The house has added a full-hour Sunday night TV show over the ABC network, titled "Jury Box Jury", emceed by Peter Potter.

HELENA RUBINSTEIN offers Hand Delight, a vanishing hand cream in pink pressure type container with floral design at \$1.25.

POND'S is backing up its milliondollar consumer advertising campaign for its new Angel Skin Lotion at the point-of-purchase with a self-help composition floor stand for mass display and variety and drug store displays.

PRINCE MATCHABELLI introduces Wind Song, a floral bouquet perfume with woody and spice undertones. It comes in an antiqued gold-decorated Willow Green crown bottle, set on a white satin platform with built-in reflector. Prices range from \$5 for a ½ oz. bottle to \$25 for a 2 oz. one; a 1½ dram crown-



Matchabelli's Wind Song perfume

embossed purse dispenser sells for \$2.50.

PONDS'S Extract Co. offers a new full color self-help easel featuring 29 cent sizes of Lips, six pieces in each of six shades. Shades are indicated by color swatches.

TONI CO., following its introduction of Tonette home permanents for children last year, is now marketing another one under the Prom label. Its non-neutralizing feature will be stressed in magazine, radio and television advertising. Involved is a potential market consisting of 17,400,000 girls of 14 years and under.

GOURIELLI goes one step further than 3-D motion pictures by offering a "Fourth Dimension" line,



"Fourth Dimension" perfume, 2 oz. size

with bottles and boxes of ultramodern design. The perfume ranges from \$13.50 for ½ oz. to \$45 for 2 ozs.; Toilet Water is \$5.50 per 4 oz. bottle; Cologne is \$3.50 for 4 ozs.; and a ½ oz. Perfumette sells for \$3.75.

GHARLES ANTELL'S advertising budget for Formula No. 9 and shampoo currently runs to about \$2,000,000 annually.

Piggie Bank Toiletries for children. Porky Pine is filled with pinescented bubble bath lotion; Porky Pinx has flesh-colored Italina afterbath-talc; and Porky Belle also



Porky Belle and Porky Pine

contains talc. The W. Braun Co. bottles, eight inches tall, when empty, may be used as piggy banks, bookends, or lamps. They sell for \$1.50 each.

whitehall pharmacal co. has started marketing of a permanent twin tubes Kolynos toothpaste combination package. Eliminating larger and smaller sizes, the firm offers two giant size tubes for retail at 69 cents, in either chlorophyll or "Kolynos Super-White". The firm hails the move as a stock-reducer for retailers.

PARK & TILFORD is distributing four perfumes, each in a transparent plastic case. The bottle rests on plastic show beds which are color-keyed to label and cap, according to the scent. The retail price is 49 cents, same as the regular year-round package.

HAZEL BISHOP'S counter display holds an assortment of 12 Trio Kits, each with three 75 cent No-Smear lipsticks. The package retails for \$1.39.

TONI CO. has added the Tuesday and Thursday CBS-TV production of "Bride and Groom" and a 15 minute simulcast of the morning "Arthur Godfrey Show" on Tuesdays and Thursdays, bringing the total number of Toni radio and television programs up to its alltime high of sixteen.

All business is specialized



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One thing about specializing is the time it saves. Take your business reading. Where else could you find, fast, the vast flood of specific facts, the up-to-the-minute information about new products, materials and methods to keep you posted on your particular field? Much of what you want isn't published anywhere else except in this business paper of yours. Its business is to specialize in your business . . . to gather, sort out, report and interpret the facts you need.

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year to report on their products and services in specialized business papers. Your share of that investment is here, in the pages of this paper of yours. Nowhere else can you find such a complete and factful source of everything you need. Time saver? It can be a job saver, a profit saver, a life saver! Read it thoroughly—cover to cover... and put it to work!

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NEXT MONTH IS ABC MONTH

OCTOBER is ABC Month, proudly observed by publications like American Perfumer, which is a member of the Audit Bureau of Circulation. American Perfumer also takes pride in the fact that it is a member of the Associated Business Publications (ABP). Taken together, the

ABC and ABP insignia reproduced at bottom of this page represent the twin hallmarks of known value in business paper publishing. *American Perfumer* is proud to be priviledged to display them.

The American Perfumer

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One of a series of advertisements prepared by THE ASSOCIATED BUSINESS PUBLICATIONS



Lancome's teardrop purse flacon

LANCOME's latest fragrance entry is Tresor, in a teardrop purse flacon, which may be worn pinned to a lapel or suspended from a belt like a chatelaine, and in a diamondfaceted de luxe flacon in amaranth satin-covered box. The perfume retails for \$8.50 to \$70; the Eau Parfumee for \$5 to \$16; the teardrop purse flacon, holding over 1/4 ounce, sells for \$9.

DOROTHY GRAY offers Quick Cleansing Cream, a liquid cleanser to remove stale make-up. It contains lanolin and 2,2'-Thio-Bis (4,6-Dichlorophenol) to help prevent externally caused blemishes. A bottle with 6 ozs. sells for \$1.

DAGGETT & RAMSDELL is holding its annual sale of Perfect Cold Cream and Perfect Cleansing Cream through October. The 8 oz. sizes, regularly \$1, will be offered at 79 cents each. Both creams are packaged in counter display cartons, six to the carton.

DUBARRY's Flatter-Glo is a new matfinish make-up. It comes in four shades and is slated to retail for \$1.10.

LEVER BROTHERS is undertaking a "pair and a spare" nylon stockings promotion, emphasizing Shadow Wave Home Permanent, and featuring three stockings for \$1 and a boxtop from a Shadow Wave kit or refill. The promotion will run until October 1. The same offer featured on other Lever packages will continue indefinitely beyond the October 1 date.

NORTHAM WARREN CORP. has scheduled a daily newspaper and women's magazine advertising campaign to introduce Cutex Chip Pruf nail polish (regularly 15 cents), free of extra cost with each 59 cent Stay Fast lipstick, in harmonizing shades

THE REALISTIC CO. offers the beauty shop trade Realistic Perfected Lipoidized Creme Wave kit. The kit consists of a four ounce bottle of Creme Curling Lotion, a four oz. bottle of Creme Neutralizer, and a 28 gram packet of Crystal Bonding Agent.

SCHNEFEL BROS, is holding a special "LaCross Kiderama" promotion featuring what is believed to be the first manicure set for boys, and two sets for girls. Boots & Saddles boys' manicure set includes a comb, nail file, finger nail clippers, and pedicure clippers in a tooled leather case with western motif. A young girls' set, Candy Parade, contains a jar of hand cream, cuticle re-mover, cuticle oil, buffer polish, nail buffer, nail file, orangewoods, emeries, a comb, and a booklet on hand care. A calendar and gold star packet combination permits the child to keep track of her grooming care. It retails for \$2.95. The Pretty Miss set for teenagers contains La Cross pastel color enamel, no-smear polish remover, cuticle oil, emeries and orange woods. In moistureproof case it sells for \$2.50.

CICOGNE, INC. is distributing a cologne in a split champagne bottle. Capacity of the emerald green

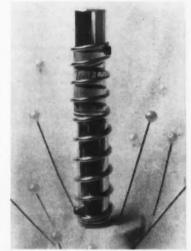


Cicogne's champagne bottle cologne

Owens-Illinois Glass Co. bottle is 6 2 5 ounces.

SHULTON'S Fall and Christmas advertising plans embrace Old Spice After Shave Lotion and Shave Cream with more magazine insertions, extended spot radio and concentrated television promotions; continued radio spots and a new television campaign for Old Spice Stick Deodorant throughout the Fall; and promotion of its new Old Spice Smooth Shave, a pressurized shave package, through a magazine and large space newspaper campaign, daily radio coverage in major markets, plus concentrated television spots from September through November.

LENTHERIC'S Tweed-Pippin Red promotion is currently stressing Tweed Bubbling Bath Oil, at \$1.75; a box of bath powder tied to a Bouquet bottle, with heather



Golden Spiral Duo: perfume and lipstick

tucked in, at \$3; Tweed Cream Perfume Sachet, at \$1.65; Golden Spiral Duo, consisting of Tweed Perfume Purser and Pippin Red Lipstick in a jeweled golden spiral, for \$5; and Tweed Bath Powder-Pac, a compressed bath powder, at \$1.50. Also offered is a display with one dozen Pippin Red Stay-Put lipsticks, each with a Tweed perfume sample attached, and each combination retailing for \$1.

WRISLEY SOAP AND TOILETRIES is currently offering, through October 1, an eight ounce bottle of Pine Bath Oil Concentre at half price with the purchase of any other Wrisley bath item at the regular price. Promo-tion suggests use of the product to relax frayed nerves.

LADY ESTHER, LTD. is planning to become co-sponsor with the Phillip Morris Co. of a new weekly Ezio Pinza situation-comedy series, beginning October 3.



The proof of the product is in the USAGE!

More than 80% of all lemon oil used in the U. S. is Exchange Brand! An amazing endorsement! The reasons are simple. Only carefully selected lemons from the groves of sunny California are used to make Exchange Oil of Lemon. This fine fruit, plus skillful processing, gives you lemon oil with superior flavor, consistent aroma and clarity with no cloud or sediment. For complete satisfaction, just specify Exchange Oil of Lemon when you order.

Distributed in the U.S. exclusively by Fritzsche Brothers, Inc., 76 Ninth Ave., New York 11, N.Y. Dodge & Olcott, Inc., 180 Varick St., New York 14, N.Y.

Sunkist Growers

Products Dept., Ontario, California Produced by Exchange Lemon Products Co. Corona, California



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The Editorial - "We"

Wars, Budgets, and Tax Reduction

W 1TH the conclusion of the war in Korea, a period of peace, precious because it is rare, seems to have descended upon most of the major areas of the world. Small-scale activities, local skirmishes, native struggles, and civil wars continue to punctuate the world scene, but nowhere is there a "hot war" involving a major power. In America, this peace will be scrutinized with utmost care, the erstwhile adversaries watched with suspicion, the personnel and the material required to contain the aggressor held in readiness. In this situation, it is a contradiction inherent in our times that Americans, almost with un-animity, desire to see a strong armed force, yet we want our sons to be civilians. We want to stand alert and prepared to meet agression with military defense; yet do not want to spill one drop of American blood if this can be avoided. And, finally, and of secondary importance, Americans are desirous of having the latest weapons, always on hand, always in sufficient quantity, and yet would welcome relief from a tax program that is burdensome.

It is today generally accepted that the end of the war in Korea will mean, at best, a lower federal budget, but without drastic reductions that will permit corresponding changes in the entire tax structure. Both because of the new situation in Asia, and because of the pledges made by the present Administration, some tax relief may be on the agenda. The refusal of the President to go along with reductions in excess profits taxes and excise tax on motion picture admissions should in no sense be interpreted as indicating that tax relief is years away. It was simply not practical this year in view of the high budget, and the specific forms of such relief proposed by some of the forces in Congress proved inacceptable to the President.

It is unnecessary to reiterate our opposition to the excise tax on cosmetics. Aptly termed the "good grooming penalty tax," its evils have been pointed out in these columns before. It is a tax predicated on the assumption that cosmetics are a luxury, something that can be dispensed with if one does not wish to indulge oneself, like new luggage or a fur coat. The arguments against the tax have been aptly stated only re-cently by representatives of the Toilet Goods Association and the National Beauty and Barber Manufacturers Association. It would seem to us, however, that the action of the motion picture interests in utilizing its influence to have Congress repeal the motion picture admissions tax was ill advised, and that the energy could better be expended in concert with other affected industries. Although motion picture exhibitors are faring badly today, it is not true that this can be attributed to the tax, but is due primarily to television, and secondarily to the poor quality of the Hollywood offerings.

With the new and lower budget in prospect as a result of the termination of hostilities in Korea, we believe that the entire excise tax structure of the government should be reevaluated. To what extent does a tax hurt industry? To what extent will the industry recover its lost ground upon repeal or modification? To what extent is it hurting the consumer who can little afford to make a purchase? These are the questions to be answered, and in those answers, we are confident. will be found the adequate reasons on behalf of the repeal, or at least diminution, of the good grooming penalty tax.

Cosmetic Retailing Course Is Offered

THE announcement by City College in New York that a course dealing with the retailing of drugs

and cosmetics should be welcome news to an industry that can profit immeasurably by greater attention to its problems in the educational institutions. The City College course will be given at night, and will appeal to students, primarily to those engaged in selling cosmetics over the counter for a living. It would seem to us, in welcoming this latest addition to the very small number of college courses devoted to the problems of the cosmetic industry, that this is an opportune moment to take note of the entire scope of cosmetic education. Where can the chemist, the pharmacist, the young apprentice perfumer, turn for a systematic study of the science and technology of cosmetics? Where can the clerk, the salesman, the aspiring and ambitious youth who will tomorrow be the executive, turn for a systematic presentation of all of the problems of this industry, its background, its history, its economic ramifications? In hailing the beginnings of study at City College, let us not overlook the greater problems still untouched and un-

Business Outlook Looks Bright

BECAUSE it is true that the for-tunes and misfortunes of any single industry are integrally related to those of industry as a whole, we were encouraged and gratified to learn that a survey conducted by the National Industrial Conference Board, in which 189 major firms were queried, indicated that the American business executives do not anticipate any serious economic declines in the near future. When 1953 will have been written into history, the dollar profits will be higher than for the previous year, although the margin of profit per dollar of sale may have declined. Thus, the rising costs, it is felt, cannot be passed on in all cases to the ultimate consumer, but must be absorbed, compensated for by new products and greater volume. This is an overall picture of business which interests us primarily because it fits in so well with a situation within the cosmetic industry. It is not to be considered singular to this industry that profits, if they are to rise, must do so by finding new products and expanding markets. If the predictions of the NICB executives, who are usually on the conservative and sober side, are to prove true, then this industry can

look for good consumer buying power in the months and perhaps years ahead.

Drug Store Outlets Alive and Kicking

IN these columns, we have com-mented on several occasions on the inroads being made in the sale of cosmetics by supermarkets and food stores. It has seemed to us that the cosmetic sales in the drug stores and department stores would not decline, but that the supermarket sales were on the increase. Now comes a report that a serious reversal is taking place, and that the supermarkets are in danger of losing a considerable percentage of their food sales. Drug chains are selling foods; deep freeze people are selling frozen foods; and selfservice in department and variety stores is becoming effective in selfing items formerly confined very largely to the super. What does all this add up to? The various industries, including toilet goods, can only benefit from the competition among the different types of stores for a large part of their market. Although individual firms may confine their products to one kind of store, the total sales of all firms in the cosmetic field through all outlets must increase because of the wide interest in these retailers to compete for that market. However, from a long-range viewpoint, is it not possible that these various types of stores are becoming more and more similar, that they are losing their identity as supermarkets, drug stores, department stores or varieties and converging toward a new entity the exact nature of which has not yet been defined?

Fair Trade Study Is Welcome News

ENERALLY speaking, a Con-General investigation is not welcomed by supporters of people or partisans of policies to be investigated. There is an exception on the docket, and that is the forthcoming investigation of the workings of the fair trade laws in the various states, the judicial cases and decisions involving fair trade, and the effect of the laws on retailers. The investigation is to be conducted by the Small Business Committee, and was suggested by a proponent of fair trade and a man generally considered friendly to small business, Senator Hubert Humphrey. It hardly requires statement that all supporters of fair trade will cooperate with this investigation, in the hope that a true estimate of the administration of the laws will be arrived at; and an understanding of the effects of such laws on all interested segments of industry and on that large and never-to-be-forgotten group, the consumer. If there are flaws in fair trade, if anyone is being harmed thereby, if improvements can be effected, this information is to be welcomed by all its warmest supporters.

Questions of Ethics In Advertising Are Raised

report has come to our desk of A report has come to be an advertising campaign carried on by a medium-sized soap company-a firm which does not make a synthetic detergent-in which the synthetic detergents, particularly for use in washing clothes, were blasted, their claims refuted, their virtues ridiculed. Exactly where the line of demarcation between ethical and unethical advertising should be drawn is a question that will probably be argued so long as advertising exists, but we were somewhat dismayed by a very clear statement that washing with the synthetics leaves the clothes soiled. "Isn't it silly to wash clothes and still leave them dirty?" the advertisement asked, and then proceeded to show that the way to avoid doing this is to use soapgood, real, honest-to-goodness soap. Now, we feel that it is one thing to say that a given soap leaves clothes cleaner, or whiter, or whatever word may be in the bright young copywriter's vocabulary that morning, and it is quite another to say that washing with the synthetic leaves the clothes dirty. Maybe we are being oversensitive to this ethical question, and if so, we should like to hear from our readers. But until we hear otherwise, we cannot believe that this campaign falls into the category of clean fighting.

A Few Frank Words About Pricing Policies

WE were interested in two statements on pricing policies that cropped up in the news recently, one about books, the other about seeds. A book publisher ran an advertisement to explain to the readers why a book had to sell for a given price, and not for fifty cents or one dollar less. The publisher went to great pains to give a complete breakdown on the cost

of the book, the printing, paper, binding, and all other factors that went into determing the selling price. The seed manufacturer, however, is reported to have said-if he was quoted correctly-that the price of garden seeds have risen only 125 per cent since 1941, whereas other commodities have gone up to a greater extent, and therefore it is time for the seeds to get into line with more increases. It would be difficult to imagine two instances of public relations more diametrically opposed than these statements of the book publisher and the seed maker. The public wants to feel that prices are fair. This is probably as strong a factor in determining whether something will be bought as the feeling that a person can afford to make the purchase. Even if a product is not exorbitant for the purse, it will not be touched by a public that believes it is being robbed. We can only applaud the manufacturer who took the consumer into his confidence, explained his price structure and costs and methods of computation. Perhaps there is need for similar public relations on the part of toiletry manufacturers, to combat some of the illusions that the public pays for advertising and packaging, and not for the contents of the bottle or box. As for the seed manufacturer, we hope he didn't say it just that way; and if he did, we hope he didn't mean what the words seem

Our Favorite Ad Slogan Of the Current Year

F OR our favorite advertising slogan in the cosmetic industry for 1953, our hats go off to Max Factor who is promoting a new lipstick shade, Riding Hood Red. According to the slogan, it is designed to "bring the wolves out." Just what Little Red Riding Hood herself would have said, we can only imagine, but the modern Riding Hoods evidently have a changed attitude toward wolves, for which we are very grateful, indeed.

Congress Expected to Act on Cosmetics Pre-Testing

Congressional action on legislation requiring pre-testing of chemicals used in cosmetics, foods, and pesticides is expected when Congress reconvenes next January. Rep. A. L. Miller, Repub. of Neb., is reportedly working on a cosmetic chemicals bill.

RETAIL BUYERS REPORT

Fragrances Slow; Perfumes in Trick Packages Selling Well to Conventioneers

JEAN MOWAT

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Chicago — Retail buyers are growing more aware of the tax on cosmetics today than at any time since it was imposed.

Larger sizes are slower moving than in years, and there is more complaint about the tax than has ever been heard. Part of this is due, according to buyers in the Middle West, to the high cost of all commodities.

"Take any item and add the tax to it and the total is something against which women are rebelling," said a State street buyer. He believes that as long as the tax remains—and there seems no indication of its removal—the total volume of cosmetic sales will continue to be smaller bottles and jars. Despite any economy offered in the larger size it is more than offset by the increased tax load. This buyer made no bones about the increased cost of just selling the merchandise.

Scent Sales Sagging

Fragrance business has been divided into two classes for the past few months: Perfumes have been extremely slow due, according to buyers in Kansas City and St. Louis, to the unusually hot and prolonged heat spell. The same was true in Chicago and Minneapolis. Yet there was not, according to market observers, the increased volume of colognes to make up this difference.

This Middle West area has had many conventions and shows during the past six weeks, and the perfume sales have shown a slight upward curve, but only if the package, or bottle was amusing, definitely different; and it was always purchased by the men to take home as a gift. "You could never sell anything like this to a woman," said a buyer in Detroit, as she pointed to the 'wigged' top of the bottle and the jack-in-the-box idea. "Women know the value of the merchandise they buy, and they will not pay for a fancy package."

"At the cosmetic shows I am not buying any of these fancy units that will cost the customer more than \$1 simply because she will not buy them. But on the other hand she will buy a unit of perfume and cologne, simply boxed, and then have it specially wrapped for a gift. She feels that she is getting what she is paying for, and that's that."

Excise tax seen cutting cosmetics volume; larger sizes most affected.

Bargain hunters Christmas shopping in August.

"Specials," "Bonuses," and "Extras" still stimulate sales, but may ultimately saturate the market.

at a larger department store. Hazel Bishop's lipstick and Complexion Glow were advertised via this medium recently and the buyer says the resulting demands have made it difficult for her to keep these items in stock.

The buyer at another store was pleased with advertising that drew sales. There was no gimmick, no mark-down. Guerlain's cologne and talc was advertised together in the local newspaper and customers came out and bought both, although they are not packaged together. Lanvin's cologne and talc was given the same type of advertising with excellent results. Combination advertising on single items, the buyer commented, drew very well.

Elizabeth Arden's Velva Leg Film and Sleek depilatory continued to sell very nicely in August, another buyer reports and, oddly enough, the range of colors in leg film are bought in almost equal quantities, with no one color seeming more popular.

Dana, Rubinstein, Coty, Lentheric Bonuses Score Excellent Sales

LEE MC KENNON

New Orleans—Advertising aids supplied by the manufacturer are usually quite welcome, especially when they are colorful and countersize, one buyer at a large department store comments. The Revlon cardboard bathtub this month was an excellent example of an unusual display piece. It was 3-dimensional and attracted a nice amount of customer attention and sales. Helena Rubinstein's cardboard display case containing her Beauty in Pairs was another welcome item. The buyer liked the colors, the size and it definitely helped sales by pulling

Bonus offers are shown on all

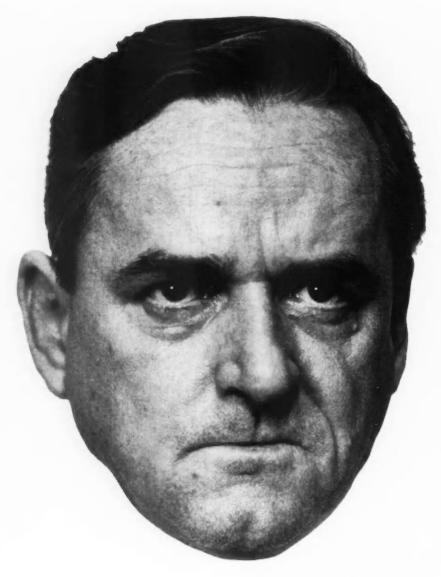
cosmetic counters this month and while most of the buyers are happy with the sales they bring, one buyer said that customers stock up on the marked-down items, or two-for-theprice-of-one until business following such promotions shows a drop. Be that as it may, the bonus offers do attract and sell the consumer. Examples are Dana's Summer Snow, the two-ounce liquid cologne and one-half ounce solid cologne together at a saving of \$1.25; Helena Rubinstein's "Buy One, Take Both" offers; Coty's \$7.00 value of four fragrances boxed together for \$3.50; Lentheric's stick cologne and Bouquet bottle, a \$2.75 value for \$2.00.

The power of TV is again praised

Promotions, Combinations Boost Buffalo Sales

MAGGIE FLEMMING

Buffalo—The R-H factor has up to now been limited to blood chemistry. But this past month it entered the field of cosmetics . . . characterizing the initials of the lines that led in local popularity. Comprising Buffalo's "R-H factor" in cosmetics were Rubinstein, Revlon, and Haviland. Rubinstein, for her Beauty-Pairs "buy one—get both" sale; Revlon for their radiated Crazy Pink nail enamel and matching lipstick; and Ann Haviland,



Don't worry, we make a practice of keeping our delivery promises. You can always be sure of getting your tubes on time from

Sun Tube Corporation

Hillside, N. J.

Waverly 3-0400

COLLAPSIBLE METAL TUBES, ALUMINUM AND ZINC CANS

SALES REPRESENTATIVES

St. Louis 1, Missouri—Marvin Yates Co., Arcade Building
Cincinnati 8, Ohio—Ralph H. Auch, 3449 Custer Road
New Orleans 19, Louisiana—R. P. Anderson Co., 925 N. Solomon Pl.
Houston 19, Texas—R. P. Anderson Co., 5643 Overbrook Lane
Dallas 2, Texas—R. P. Anderson Co., 1122 Texas Bank Building

St. Paul 1, Minnesota—Alexander Seymour, 712 Pioneer Building
West Coast—Wm. J. Stoepker, 301 E. Colorado, Arcadia, California
Canada—Sun Tube Corp., 145 Spruce Street, Ottawa, Ontario
Mexico—Tubos de Estano, S. A. de C. V., 174 Oriente No. 267, Colonia
Moctezuma, Mexico, D. F.

talk about Samplers...

EMALDENE

. . . a lasting fragrance of real appeal

at \$16.00 per lb. 1.25 per oz. . . . check, test and prove to yourself any or all of the three SYNTOMATIC September SAM-PLER SUGGESTIONS herein mentioned. Prove them for quality, effectiveness and for economical application . . .

EVERDENE

. . . a perfume oil blend which is ever popular

at \$12.00 per lb. 1.00 per oz.



MAXINE

. . . a bouquet with maximum floral character

at \$22.00 per lb. 1.50 per oz.

P.S. for that matter . . . should you want a blend for a particular purpose . . . you need but ask . . .

SYNTOMATIC CORPORATION

114 EAST 32nd STREET

NEW YORK 16, N. Y.

MURRAY HILL 3-7618

GETTING JOBS for PEOPLE AND PEOPLE for JOBS

The Toilet Goods Association is not an employment agency nor has it any intention of engaging in competition with the competent and able employment agencies whose business it is to find job opportunities in the toilet goods field. However, back in 1946 in an effort to help our returning service men, we offered to be of what assistance we could in placing them in jobs in our industry. We felt the industry presented them with great opportunities and that they in turn could be of value to our members in many positions both important and minor.

So at that time we began the practice of inserting what might be called "Situation Wanted Ads" in some of our bulletins, always in the interests of service men and women. Somewhat to our surprise and embarrassment we began to receive calls from non-service people, some with excellent backgrounds in the industry, requesting that we do the same for them. This presented a real problem and we had to devise rules to meet it. These rules are:

- For all excepting returning service personnel, we restrict the service to executive, sales or technical people.
- 2. We accept no applications from people presently employed unless their employers are aware of the fact that they are seeking a change.
- 3. Because the service seemed likely to get completely out of hand, we no longer run "Want Ads" in the Bulletin Service. Instead we maintain an active file of applicants and of employment opportunities, and refer applicants when suitable jobs come to our attention. Occasionally we issue a Bulletin listing the types of applicants in that file.

We are happy to report that we have been able to place many people and we believe that this extremely limited service has been of value to the industry as well as helpful to capable people seeking employment. We urge members of the industry, when they are looking for experienced executive, sales or technical personnel to call the T.G.A. Perhaps we know of just the sort of person who will fit that job in your organization. That would be a T.G.A. service to you and a helping hand to the person who may want—and need—the job which you have to offer.



THE TOILET GOODS ASSOCIATION, INC.

9 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

Further advertisements in this series will present to the industry what we feel will be an interesting picture of your Association's activities. Please read them and get to know us better.

for her Floral Frost summer cologne which was outselling other colognes

of this type.

One single plug for Revlon's Crazy Pink nail and lipstick en-semble on J. N. Adam's T-V shop-ping program brought a buying response that was phenomenal. Counter displays at the other stoes, supplemented by clerks bedecked in this Crazy Pink combination, produced results far above average.

Fitted and unfitted Koroseal traveling bags, ranging in price from \$1.00 to \$6.00—with or without handles, were enjoying steady turnover at the Wm. Hengerer Co.

J. N. Adam's reported that this summer's business reflected a greater fragrance and fashion consciousness among its patrons than ever before . . . with nail and lipstick combinations being better received, and an improved reception being accorded fragrance promotions. More interest is being shown in going-away-to-school gifts this year, and some small-sized, moderatepriced packages of top-price merchandise has already been bought up by customers for lay-away Christmas presents!

more favor, particularly in the large department stores. Many stores are taking this time to familiarize their clerks with fall and winter promotion and particularly with new products already ordered from manufacturers. For instance, the new fragrances scheduled to be introduced this fall already are being discussed in the departments and ideas on merchandising are being accumulated.

The newspapers carry the lion's share of cosmetic promotion. A large portion of this is provided by the manufacturer on items being given special sales. A. Harris had particularly good results with a special on Dorothy Gray dusting powder.

Neiman-Marcus has continued its summer series of ads devoted to summer care of skin and hair.

Most stores reported that their sales of travel kits fitted with plastic non-breakable bottles, has been better this year than any previous one. Clerks believe that just now are customers realizing the wonderful convenience of these kits and are willing to buy new bottles of products they may already possess in order to get the travel kits.

Chain drugs and department

Back-to-School Drives Stress Make-Up, Grooming Aids; Fall Fragrance Promotions Set

IEAN ROBERTS

Dallas-Back-to-school promotions are the main concern among the Dallas stores right now. And according to most cosmetic department heads, their products are entering into this picture more and more each year. This is not so much an invasion into the make-up field as into the grooming field,

Back-to-school style shows this year have carried not only samples of perfumes, colognes and lipsticks but have also stressed cleansing creams, astringents, body powders and so forth.

Since traffic through the stores is cut so drastically when the thermometer continues in the 100's, department heads have been using the past few weeks to get ready for fall.

Preparing for Promotions

Consultation with the clerks themselves is gaining more and



"horse sense"

The priceless ingredient in designing and manufacturing

FOLDING BOXES AND DISPLAYS

Besides inspired creation and economical production, our half century of top-flight merchandising experience permits us to inject into the solving of YOUR problem the priceless ingredient that clinches the sale.

AL . GONQUIN 5-4848

Brooks

304 HUDSON STREET. NEW YORK

stores both have concentrated this month on having a variety of small items conveniently displayed for traffic. Most stores used part of a counter where store traffic is heavy. A. Harris uses a special cart which can be wheeled close to the outside

door. It always has a well designed display card as an attention getter and a variety of low priced articles suitable for the season and weather. Displays on this cart are changed often and it has proved most successful.

Perfumes, "Specials" and "Extras" Good; Sticks Pick Up

MARY LINN WHITE

Cincinnati—Perfumes headlined the month's news here, with Coty's four-perfumes package at \$3.50 one of the main contributing factors to the "good" report from most cosmetics departments. This was to be expected, since good name brands, packed as perfume instead of cologne, and in small batches at small price, have all done very well here.

Solid scents, too, came to the front of the counter and walked out, after a very slow and late start. Lucien Lelong's sale of two-for-\$2 was successful wherever the house was available, and Shillito had particularly good luck with it because of a clever display: a cart in the middle of the department with dry ice.

Arden's cologne with the puffpuff gimmick was still good, as was Coty's toilet water with an atomizer. Coty's trick of giving an extra (such as a solid cologne with the talcum) is well-liked here, just the come-on that our traditionally budget-minded women need.

Revlon's nail polish with matched lipstick was good at Mabley and Carew and McAlpin's, selling out completely at the former. At Shillito, "Crazy Pink" was the color most wanted in this special, and mainly with the younger set.

Sun Goods Still Selling

Because intensely hot weather lasted well on toward fall, so did booming sales of sun-tan oils, lotions, Lite and Brite (McAlpin's), Lilt, Toni (McAlpin's), travel kits of plastic bottles (Shillito), and shampoos and Rubinstein's "Blond Beauty" (Alms and Doepke). The Rubinstein representative sold well in Alms and Doepke.

Early days of the annual Helena Rubinstein "Beauty Pairs" promotion gave hope that it would be even greater than the usual hit; Hazel Bishop's two lipsticks at \$1.18 were good (her liquid makeup seems to be cutting in on the market which Powers opened for liquid makeup). In short, all promotions planned were gratifying.

Which brought one salesgirl to this comment: "With Dorothy Gray's skin lotion and texture cream promotion coming up, and Dorothy Gray's cold cream and Tussy's creme and lotion and Rubinstein's pairs, I think it confuses the customer, and the sales girl can't do her best by all the specials. One or two are bound to fall by the wayside. I think they should be staggered somehow, so that not so many come at once."

There's a growing trend here toward self-service counters in cosmetics. Customers like to look, feel, read labels, though a few still want to have a product's properties explained individually.

MODULAN

MODULAN is a chemically treated lanolin containing all the constituents of lanolin deliberately modified by a unique treatment to introduce new and valuable properties.

It represents a radical departure from lanolin in structure, function and odor, and more closely approximates the normal human skin fat.

Investigations now being conducted indicate that MODULAN is hypo-allergenic.

SOLUBILITY— Because of induced chemical differences in molecular structure, MODULAN is far more hydrophobic than lanolin and forms clear solutions in mineral oil.

TEXTURE – MODULAN solutions leave water-resistant protective films which are inherently softening and prevent defatting. These films are waxy rather than tacky and are very agreeable to the touch.

COMPATIBILITY— Because of its outstanding compatibility with oil-in-water emulsions and with soaps and shampoos, MODULAN can be used in high concentrations without affecting stability and foaming.

In addition to the above mentioned advantages, MODULAN deposits an emollient, protective film and is therefore highly effective in baby oils, hair dressings, soaps, shampoos, oil-in-water creams and lotions, lipstick, and other cosmetic and pharmaceutical products.

Detailed information available on request.

AMERICAN CHOLESTEROL PRODUCTS

MILLTOWN . . NEW JERSEY



Flavor Section



Food, Chemicals and Flavors

Foods and flavors are not simply chemicals and it is a gross oversimplification to imply that these terms are virtually synonymous. . . . A timely and logical analysis of the terms

MORRIS B. JACOBS, Ph.D.

Thas become relatively fashionable within the past four or five years, that is within the immediate period in which the question of the use of chemicals in foods became moot, to say in an off-hand manner that there is no difference between the terms food and chemical, for foods are really chemicals. Some food technologists, chemists, and toxicologists have adopted this contention.

For example, in an unsigned article in *Progress Thru Research*, 6, No. 3, 5 (Spring, 1952), one finds the statement, "Actually, of course, foods themselves *are* chemicals. For the most part, they are composed of carbon, hydrogen, oxygen, and nitrogen—chemical elements linked together to form complex materials." (The italics are those of the unsigned author). This statement appears in an article entitled "Common Sense about Chemicals in Foods" dealing with irresponsible attacks on the employment of chemicals in foods.

Another example of this type can be taken from the article by R. F. Sebrechts on quality control in candy manufacture in *International Confectioner* 63, No. 4, 8

(1953). Here we find, "Candy has been regarded as having intangible and variable properties which could not be given definite expression. It is a common tendency, where we have an edible product, to disregard its being a combination of chemicals, which it most certainly is."

Both of these articles have useful purposes in mind. The first to stress the need for exercising proper judgment in the passage of laws governing the use of chemicals in food and the second to stress the need for adequate technological help in the production of candy. With both of these points of view I agree but I cannot accept their premise that foods are chemicals.

It appears to me that it is about time that flavorists, flavor chemists, and flavor manufacturers took issue with the patently false statement that "foods are just chemicals."

A plain Case of Logic

It is simply not true that "foods are chemicals." Some chemically pure substances are foods, for example, sucrose is the substance

we commonly call sugar. Others in this category will be mentioned below. In the processing of foods, they may be handled with the care utilized in the processing of fine chemicals. Neither of these factors nor the fact that foods are composed of chemical elements makes foods chemicals.

Such confusion arises from a lack of knowledge of elementary forms of logic. I do not pretend to know the exact category of fallacies in which the fallacy:

Violets are flowers Roses are flowers

Therefore violets are roses falls but it is equally fallacious to maintain that:

Foods are made of chemical elements

Chemicals are made of chemical elements

Therefore foods are chemicals Now nearly everyone knows that violets are not roses and pretty nearly everyone knows, including I suspect the authors of the articles noted above and others like them, that foods, with negligible exceptions, are not chemicals.

I trust that one more illustration will make this point clear. The fact that an airplane may be powered with an internal combustion engine using gasoline as a fuel and capable of running on a road on the ground with 3, 4, 5, etc. rubber-tired wheels does not make the airplane an automobile.

Chemical

In Webster's New International Dictionary of the English Language Unabridged, (Merriam, Springfield, 1949) the noun, chemical is defined as a substance obtained by a chemical process or used for producing a chemical effect. Heavy chemicals are those produced and handled in large lots, and often in more or less crude quality as in the case of sulfuric and nitric acids, caustic soda, aluminum sulfate; fine chemicals are those handled in smaller lots; and often in specially purified condition.

Grant in Hackh's Chemical Dictionary (Blakiston, Philadelphia, 1914) defines the term "chemicals" even more specially and in a more limited sense than Webster. Thus according to Hackh a chemical is a compound or a substance of definite molecular composition. This text indeed makes the following distinction, "Generally the term chemical is restricted to a substance consisting of a single molecular species, while the term drug refers to a substance derived from the vegetable or animal sources and often a mixture of substances."

Food

Again if we refer to Webster we find that food is defined as nutritive material absorbed or taken into the body of an organism which serves for purposes of growth, work, or repair, and for maintenance of the vital processes. Webster goes on to point out that animals differ greatly from plants in their nutritive processes and require in addition to certain inorganic substances (water, salts, etc.,) and organic substance of unknown constitution (such as undefined vitamins) not ordinarily classified as foods (though absolutely indispensable to life, and contained in greater or less quantity in the substances eaten) complex organic substances which fall into 3 groups (1) protein, (2) carbohydrates, and (3) fats. The texture, consistency, digestibility, palatability, etc., (factors which may often be modified by cooking), also materially affect the value of a food substance.

In Hackh, food is defined more simply as a substance which serves to build up tissues, repair waste, and supply living organisms with heat. Jacobs in *Chemistry and Technology of Food and Food Products* (Interscience Publishers, New York, 1951) defines food by its functions, namely, that it has three chief functions. First it serves as fuel for the body, providing heat by a process of slow oxidation; second, it furnishes the build-

ing material for growth and repair; and third it provides for the regulation of the body functions.

In Van Nostrand's Encyclopedia (Van Nostrand, New York) a food is defined as a substance used to maintain certain essential processes in living organisms, notably to furnish cell and tissue-building materials, and to provide heat and energy, as well as to supply auxiliary substances needed for the functioning of these processes.

Flavorings

A flavoring, or, as the term is more commonly used, a flavor may be defined simply and to the point as anything such as an essence or extract or mixture or substance employed to give a particular flavor. I have discussed at great length the flavor sensation and need not go into that phase here.

Comparison

It is clear then from a comparison of these definitions that only in relatively rare instances, particularly when the definition of chemical as given by Hackh is borne in mind, are true chemicals foods. Among these one might mention the pure carbohydrates, sucrose, dextrose and dextrose hydrate and lactose. Common salt or sodium chloride may also be considered as a chemical food. But with these few exceptions and the additional one of dilute acetic acid used as vinegar most foods are indeed complex materials which cannot be considered chemicals.

The idea that we, as human bein's, merely consume chemicals and are, in truth, just furnaces or reaction chambers for consumption and oxidation of foods is too simple a mechanistic concept for a flavorist to accept.

We know that an adequate food supply depends upon several factors, namely:

1. Enough protein material to supply an adequate amount of the necessary amino acids.

2. Sufficient digestible organic material (carbohydrate, fat, and protein) to yield the required energy

3. Adequate quantities of the vitamins needed by human beings.
4. Adequate quantities of the

vitagens needed by human beings.
5. Mineral matters in sufficient quantity and correct proportion.
6. Adequate amounts of good

water and air.

We know, however, from prac-

tical experience that if one were to make up a practically synthetic mixture of all the essential growth and life requirements, that is, a mixture of purified carbohydrates (sugar and starches); purified fats or fatty acids including the necessary unsaturated acids; purified essential amino acids and even those not essential but found present in proteins commonly used; all the known vitamins and vitagens; and the necessary minerals, one would indeed have a mixture of chemicals but one would still not have food that could sustain life and thus be considered a real food.

The flavor and palatability of a food cannot and must not be ignored for such a mixture could not be consumed by human beings for any practical period of time.

Let those who wish consider a flavorsome soup, a succulent steak. a delicious cake, a satisfying cup of coffee, a thirst-quenching beverage merely chemical concoctions. To me these are foods.

And so to really have some "common sense about chemicals in foods" we can make a good start by avoiding the nonsense that "chemicals are foods."

Flavored Notes

TWO papers of interest to readers of this section appeared in Agricultural and Food Chemistry, June 24, 1953 issue. Both dealt with citrus flavoring. The first was concerned with the volatile water-soluble components of grapefruit juice by J. G. Kirchner, J. M. Miller, R. G. Rice, G. J. Keller, and M. M. Fox of the Fruit and Vegetable Chemistry Laboratory, U. S. Department of Agriculture, Pasadena 5, Calif.

The second was concerned with the volatile oil components of grapefruit juice and was written by J. G. Kirchner and J. M. Miller of the aforementioned laboratory.

In view of the interest in the relative toxicity of various materials used in foods an interesting paper to review is that of Elliott A. Maynard, Division of Pharmacology and Toxicology, The University of Rochester School of Medicine and Dentistry, Rochester, New York in Food Technol. 6, 351 (1952). This was also published in Food Processing Oct. 1952.—M.B.J.

Resorcinol and its uses are covered in a 16-page brochure issued by the Koppers Co. Inc. A copy will be sent to anyone interested.



SEPTEMBER

Sampler

NEW DUAL-USE COUPON

for

YOUR CONVENIENCE

for

- 1. Requesting Information or Literature
- 2. Ordering Samples

The handy coupon on the third page of the Sampler Section is divided in two sections. As you will see, one section is to be used *only* when further information and literature is wanted. The other section is for *ordering* Samples.

429—ABSOLUTE JASMINE—E

A true simulation of absolute Jasmin Extraction. To be used to replace the absolute outright or in conjunction with the absolute.

\$25.00 per lb.

ALBERT VERLEY & COMPANY, INC. 114-116 East 35th St., New York 10, N. Y.

430—CHANTINE New Perfume Oil Concentrate

This new perfume oil has a sweet, delicate feminine fragrance with wide appeal and great adaptability in all cosmetics and toiletries. Possesses unusual lasting powers and contains all of the necessary fixative properties.

necessary fixative properties.

2 ox. sample—\$1.50 1 lb.—\$9.50

AROMATIC PRODUCTS INCORPORATED
15 East 30th Street, New York 16, N. Y.

431—AEROSOL SWEET SPICE

Developed specifically for use in the new Aerosol Artificial Snow products, Sweet Spice (40-R-4191) has been tested with particular reference to stability, solubility and freedom from corrosion or clogging elements.

\$5.00 per pound \$.50 once ounce sample DODGE & OLCOTT, INC. 180 Varick Street, New York 14, N. Y. Fundamentals in the Manufacture of Cosmetics. II. Face Powder. W. P. Pepper (Perfum. Essent. Oil Rec., 1952, 43, 77-79; cf. B, 1952, II, 645). Some 30-70% of talc, having excellent spreading qualities, is used as a base. TiO₂ (6-10%) or more commonly ZnO (20-30%) make the powder cling and also H₂O-repellant. CaCO₃ spreads well and has greater covering power than talc. MgCO₃ absorbs perfume and is used as a vehicle for the latter. The use of starch has latterly declined due to its tendency to deteriorate on keeping. Both the perfume and the pigment should be inert. K. Foulkes. B.A., B II, p. 864.

Hair-Dye Set. K. Goldstaub, trading as "Chemische en Cosmetische Fabriek Trieboliet-Flora." Dutch 68,269, July 16, 1951. The set consists of a hair-dyeing base (I) and a developing liquid (II). I is I of the known dye bases which are changed into dyes by the action of an O-supplying developer. II is a soln. of H2O2 to which has been added enough wetting agent (Turkish Red Oil, Gardinol, Teepol, etc.) that the latter not only stabilizes the HO. but at the same time also may be used as a washing agent for the hair. E.g., II is prepd. from a 15% soln. of H₂O₃ and a 60% soln. of Turkish Red Oil in a proportion of 1:3. In the set I and II are delivered in equiv, quantities. H. P. T. C.A. 46,

432-HYDRO CHEVREFEUILLE

A very rich odor reproducing faithfully the lovely fragrance of the flower.

\$5.00-1 lb.

ROURE-DUPONT, INC. 366 Madison Ave., New York 17, N. Y.

433—HYDRO LILAS

A good Lilac odor, at a very low price.

\$3,20-1 lb.

ROURE-DUPONT, INC. 366 Madison Ave., New York 17, N. Y.

434-LAVANDEX D-149

A fresh, flowery Lavender type perfume for use in colognes, toilet waters, after shave lotions, liquid soaps and shampoos. An exceptional value where a lowcost Lavender perfume is required.

1 lb.—\$3.50 4 ex. sample—\$1.00

NAUGATUCK AROMATICS 254 Fourth Avenue, New York 10, N. Y.



Sampler

435-MUSK-T

A faithful reproduction of Natural Tonquin Musk. A solution of 2 ozs. to 1 gallon successfully replaces the natural tincture 4 ozs. to 1 gallon.

\$50.00 per lb.

ALBERT VERLEY & COMPANY, INC. 114-116 East 25th St., New York 10, N. Y.

436—NEROLI SYNTHETIC "SCH & CO."

Approximately 20% more effective than finest Neroli Bigarade Distillate in odor, in strength, and in price. Does not discolor.

Samples: \$32.50 lb. 2.15 ez.

1.10 1/2 oz.

SCHIMMEL & CO., INC. 601 West 26th Street New York 1, N. Y.

437—PHANTINE Subtle New Fragrance

Phantine is a combination of many of the ingredients contained in the world's most popular perfumes. Light and flowery—yet long-lasting and subtle. Fine for perfume, toilet water, sachet, talc, creams and lotions.

2 oz. sample—\$1.50 1 lb.—9.50
AROMATIC PRODUCTS INCORPORATED
15 East 30th Street, New York 16, N. Y.

Report on Antibiotic Activity of Seaweed Extracts, by Robertson Pratt, Henry Mautner, Grace M. Gardner, Yi-Hsien sha, and Jean Dufrenoy. Several species of marine algae collected during the fall and spring on the central California coast, yielded extracts that inhibited the growth in vitro of one or more of the following species of bacteria: Staphylococcus aurens, Escherichia coli, and Pseudomonas aeruginosa (pyocyanea). The inhibitory activity of the extracts was not due to iodine. Extracts prepared from plants collected during the winter months were devoid of antibacterial activity. Journ. of the Am. Pharm. Assoc. XL, 575, 1951

The Composition of Sapote Cum, by Ernest Anderson and Harvey D. Ledbetter. Sapote gum is a mixture of 90 to 94 per cent water-soluble polyuronide and 6 to 10 per cent water-insoluble resin. The two substances can be separated by dissolving the polyuronide in hot water and filtering off the resin. The polyuronide consists of the calcium and magnesium salts of a methoxyuronic acid to which pentosan material is attached. There is approximately 1 methoxyl group to 2 uronic acid groups and 7 anhydro pentose groups in the complex acid. D-Xylose and Larabinose are the only sugars present. Approximately 8.5 xylose groups are present for each arabinose group. A mild acid hydrolysis liberates all of the L-arabinose. Under these conditions most of the D xylose remains attached to the uronic acid. More vigorous acid hydrolysis liberates most of the D-xylose. An aldobionic acid consisting of the methoxyuronic acid attached to one molecule of D-xylose remains. Journ. of the Am. Pharm. Assoc. XL, 623, 1951

438-PINAPEROL

A single chemical possessing the freshness of Pineapples. It is used in flavors but finds an increasing place in perfumes for its delightful top note. Try 1 or 2% in your Lily, Muguet or other floral compounds.

\$1.50 per ounce

VERONA CHEMICAL COMPANY 26 Verong Avenue, Newark, N. J.

439-PINE NEEDLES FIXATIVE

Reproduces truthfully the odor of fresh pine needles. It is very long lasting and therefore well suited for use as a fixative.

\$3.80 per pound

FINE AROMATICS, INC. 342 East 34th Street, New York 16, N. Y.

440-RESEDALIA

An acetal of great value to the perfumer. A small amount added to floral compositions produces dramatic effects.

\$1.25 per ounce

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SEPTEMBER

Sampler

441—SODIUM LAURYL SULFATE USP Extra

Made by sulfating specially purified Lauryl Alcohol, thus removing irritating factors caused by lower alcohol sulfates. Contains a minimum of C16-C18 alcohols giving increased solubility in cold water.

1 lb. sample—\$0.81 ACETO CHEMICAL CO., INC. 40-40 Lawrence St., Flushing 54, N. Y.

442-VANITROPE

A new powerful and pure, vanilla-like flavor material, 16-25 times the strength of vanillin. Vanitrope will improve your vanilla flavor and will lower your cost. Vanitrope is a brand of propenyl guaethol. Brochure available.

Price—\$27.00 lb.
FINE CHEMICALS DIVISION OF SHULTON, INC.
630 FIRM Ave., New York 20, N. Y.

Medicated Soaps. Kodavanti Narasimham (Berar Oil Inds., Akola, India) Indiana Soap J. 16, 223 (1951) A practical formula is: toilet soap base 100, lanolin 7, S 10, and wood tar 15 parts. Mix the last 3 ingredients well and add to the soap at the milling stage.

Alcohol Gel. M. Warchavsky. Fr. 971,225, Jan. 15, 1951. An alc. perfume, 100 g., is mixed with 3 g. ethylcellulose, and the mixt. is well stirred with an aq. gel. of 1 g. methylcellulose in 20 cc. water. L. A. Manning. Chem. Abs. 46, 16, 7719.

Creamlike Soft Ointment Base. Takao Kariyone (to Kao Soap Co., Inc.) Japan. 3764 ('50). Oct. 27. The ointment base is made of white vaseline 25, hexadesonal 25, sulfonated dodecyl acl. 15, sorbitol 11.5, and water 37 parts. Chem Abs. 46, 21, 10552 & 10553, 1952.

443—WATER-SOLUBLE PRESERVATIVE

Methyl Chemosept® Sodium is the only water soluble preservative of the Para-Hydroxybenzoate type. Goes into solution readily, protects emulsions and creams more effectively.

1 lb.-\$2.60

CHEMO PURO MFG. CORP

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"The Sampler is always welcomed and read with much interest. It is a helpful source of information and we thank you for it."

—from a letter written by the Laboratory Director of one of the best known cosmetic and perfume manufacturers.

AMERICAN PERFUMER 48 West 38th Street, New York 18, N. Y.

SEPTEMBER SAMPLER INFORMATION REQUEST FORM

Please have further information and literature sent on items as circled below.

429	432	435	438	441
430	433	436	439	442
431	434	437	440	443

2. SEPTEMBER SAMPLER ORDER FORM

Please have samples with invoices to cover sent on items as circled below.

429	432	435	438	441
430	433	436	439	442
431	434	437	440	443

Please attach coupon to your company's letter head or comparable identification.

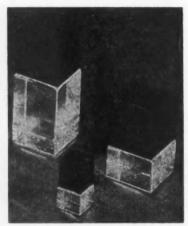
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New Products



Square-shaped Spillproof perfume flacons

New Square Shape Flacons

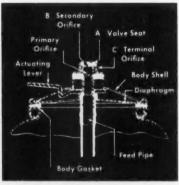
The popular Spillproof perfume flacons offered by the Richford Corp., 251 Fourth Ave., New York, N. Y. are now available in a new square shape in six sizes ranging from ½ dram to one ounce. The new flacons were designed to meet the demand for an ultra smart flacon with enough simplicity to wear well with any clothing or accessories. They are available in crystal, gold or silver with matching black caps. Samples and complete information may be had by writing to the company.

New Aerosol Valve

The new dispensing valve announced by the Risdon Manufac-



Aerosol valve's surface and cap



Cross-sectional drawing of the valve

turing Co. has design features it points out which may make possible new pressurized products, lower costs, new package styling and improved spray performance. It has a flexible metal diaphragm and valve seat made of nylon or teglon which it is stated permits the use of all standard propellents plus such high solvency propellents as freon 21 and 22 and lower cost methylene chloride. It is expected that this feature may make feasible the aerosol packaging of new and heretofore impossible products. The surface and cap of the valve present a streamlined, all metal appearance. Protective overcaps are available in lithographed colors and various designs. Free operating samples of the valve on an actual loaded dispenser are available on request upon a company letterhead.

New Polyethylene Bottle Line

A new line of polyethylene bottles is announced by the W. Braun Co. which recently formed a subsidiary, Plasticrafters Inc. to manufacture and market the new line. Several sizes of standard cylinders and oblong styles are already available as stock items and special attention is to be given to private mold designing as well as to applied labeling and decoration through another W. Braun affiliate, Glasscrafters Inc.

Tiny Parts Cabinets

For storing tiny parts at a minimum distance from standard sized parts frequently needed at the same time the Precision Equipment Co. has added stainless steel tiny parts cabinets to its line. In offices, it is pointed out, the cabinets are especially useful for storing paper clips, rubber bands, pencils and other supplies.

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Soap Section

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Soft Soap for Toilet Use

How to judge a soap by its sales appeal, its packaging, fatty matter, rosin acid and alkali contents.

PAUL I. SMITH

B UYERS of soft soap for toilet use have their own parties lar tests which have been found as the result of long experience to be indicative of quality. In addition there are of course, gov-ernmental and institutional standards of tests laid down by the various academic bodies. Indeed, there is a great wealth of information available on the testing of soap. The extent and variety of this information may well cause some confusion and there is a real danger of newcomers not being able to see "the wood for the trees." It is, however, possible to set out some of the most important means of judging the quality of soft soap intended for toilet use.

The first and probably the most significant factor to determine is the sales appeal of the soap, i.e., its appearance and general appeal. A good quality and good selling soft soap should have a golden colour and a jelly-like texture, smooth to the touch and devoid of any strong odour. It should dissolve readily in water and the solution should have good lathering and detergent properties.

When examining a soft soap it is necessary to bear in mind that it is liable to lose moisture and thereby suffer in appearance and consistency. Adequately sealed packages are essential if factory freshness is to be maintained.

Soft soap for toilet use should contain no rosin or other additives and have less than 0.1% free caustic alkali calculated as K₂O present. The safe total free alkali percentage must not exceed 1.0% and this percentage is too high for soft soap intended for medicinal purposes.

The total fatty matter content of a good quality soft soap is 38-40% and it is essential that products having a lower percentage should not be purchased for toilet use.

Summarizing the methods of evaluating the soap, the following are most important tests:—

 Determination of Total Fatty Matter.
 Determination of Total Free

Alkali.
3. Determination of Free Caustic Alkali.

4. Determination of Rosin Acids.

Sorbitol In Shaving Cream

SORBITOL is one of the most versatile of the family of polyhydric alcohols or polyols of which

glycerine and the glycols are well known members. It is prepared commercially from refined natural sugars, the same grade that is used in the baking and confectionery trades. As an additive for shaving cream sorbitol offers soapers these important advantages:

 Low cost and plentiful supply.
 First class humectant able to effect required conditioning of shaving cream formulations.

Complete chemical inertness and compatibility with cream ingredients.

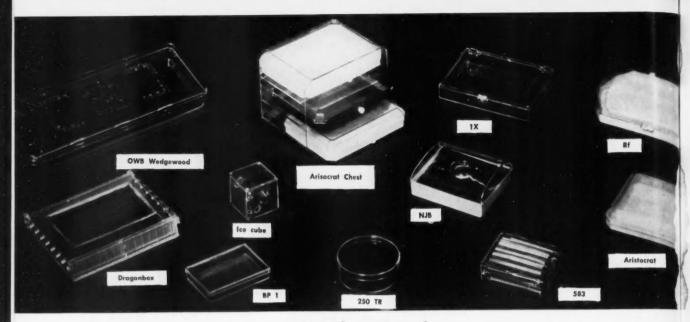
4. Non-toxicity and non-irritant, freedom from odour and colour.

5. Non volatility sorbitol does not evaporate and is a permanent conditioner.

6. High viscosity and ability to give body to the product.

The soaper makes use of sorbitol to improve texure and keeping properties, in other words, the addition of the polyol to the cream prevents it from becoming too dry through loss of moisture and enables it to retain its sales promoting smoothness. Good results have been obtained by using 2.5% sorbitol on the weight of shaving cream, but larger quantities can be employed without detracting from the quality of the product.

Sorbitol is available in two forms—solution or syrup and crystalline powder. The liquid polyol may be bought as a 70% and 76% solution, both of which show a good resistance to crystallization. For soap manufacture, the 70% solution is the most suitable and it is usually marketed either in 55 gallon lined steel drums containing 600 pounds of syrup or in tank cars. —Paul I. Smith.



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NEW TECHNICAL Bulletin A122, just off the press, shows how to protect your emulsions with the same agents you use to control viscosity. Very small amounts of VEEGUM are extremely effective in stabilizing emulsions prepared with non-

vee in stabilizing eliuisions prepared with non-ionic and anionic surface agents. Less than 1% VEEGUM will permanently stabilize many types of emulsions containing oils, fats, and waxes. VEEGUM also effectively stabilizes liquid emulsions containing significant amounts

As a thickener, VEEGUM is white, opaque, non-tacky, and non-gelatinous when dispersed in water. Its unique action of thickening with heat maintains product consistency at higher than normal temperatures.

VEEGUM is non-toxic and non-irritating. It is a highly purified Colloidal Magnesium Aluminum Silicate. Use VEEGUM for improved emulsification, suspension, and thickening.

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R. T. VANDERBILT CO.

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- ☐ Please send VEEGUM bulletin A122.
- ☐ Please send sample of VEEGUM.

(Please attach to, or write on, your company letterhead)

N EWS and EVENTS



H. M. The Queen Mother and H.R.H. Princess Margaret pause before the Dorothy Gray presentation during the royal visit to the toilet industry's exhibit at the British Industries Fair. They are escorted by R. L. Demuth, chairman of the Toilet Preparations Federation.

Lambert's Antizyme Opens Fall Dentifrice Race

Claims for a number of new ingredients are expected to set off a new dentifrice race among leading manufacturers, with extensive fall promotions scheduled.

The Lambert Pharmacal Co. fired the opening shot with Listerine Antizymine, which is claimed to protect teeth from 12 to 24 hours. The anti-enzyme contents are claimed to prevent the production of decay acids.

The American Dental Assn. has attacked such actual or implied claims of anti-decay qualities as premature, stating that it was contrary to the public interest to suggest that the use of any dentifrice might be substituted for well-recognized dental health procedures.

Meanwhile, the Lambert Pharmacal Co. is going ahead, with others following, or ready to follow. Its product comes in 33 and 59 cent sizes; dealers are offered one tube free with every 11 as an introduction.

The Block Drug Co. has also started a campaign around its antienzyme ingredient in its Amm-ident product.

Colgate is said to be ready to follow suit with a major drive of its anti-enzyme toothpaste, built around the theme: "Protects your teeth all day long."

Bristol-Myers Co. has planned heavy advertising backing for Ipana and Ipana AC to introduce a new ingredient it calls WD-9.

The Rystan Co. estimates that companies using its patent sold about \$15,000,000 worth of chlorophyll dentifrices in just over a year.

Interest in Profit-Sharing Seen Growing in West

Interest in profit sharing as a practice of good business management is growing rapidly among western industrialists, according to John C. O'Keefe, field secretary for the newly organized California chapter of the Council of Profit Sharing Industries which recently established offices in Pasadena.

Five Breck Hair Preparations Freed from Excise Tax

Five Breck hair preparations have been freed from the cosmetic excise tax, according to a notice by the Commissioner of Internal Revenue. They are Breck Hair Lotion 1A, Hair Lotion 1B, Ointment, No. 1 Hair Cream and No. 2 Hair Cream.

W. J. Bush & Co., Ltd. Appoints H. W. Vernon Director

W. J. Bush & Co., Ltd., London, has announced the appointment of H. W. Vernon, B.Sc., F.R.I.C., to the Board of Directors.

Mr. Vernon took his degree from Manchester University and was a Mercer Research Scholar for five years at Oxford University, where he studied under the late Professors W. H. Perkin and N. V. Sidgewick. Entering the Research Laboratory in 1922, his responsibility for general chemical development culminated in his appointment in 1948 as Chemical Superintendent for the company's three chemical factories in the United Kingdom. He is a Yorkshire man by birth, is married, and has a son and daughter.

Industry Representatives Urge Repeal of 20% tax

Repeal of the 20% retail excise tax on cosmetics and toilet preparations was urged by representatives the Toilet Goods Assn., the Beauty and Barber Mfrs. Assn., and the Natl. Assn. of Retail Druggists. Representing the T.G.A. was Joseph Keho, president of Dorothy Gray, assisted by Fuller Holloways of Hamel, Park & Saunders, Washington Counsel for the T.G.A.; for the B.B.M.A., Jacob Reck, executive vice-president; and for the N.A.R.D., George Frates. All except the last named favored the placing of the tax, if one had to be maintained, at the retail, rather than at the manufacturing level.

New Law Allows Optional Monthly Drawback Payments

Optional monthly payments of drawback claims due and payable quarterly upon filing of proper claims with the secretary of Internal Revenue is provided by the ecently passed Curtis Bill, H. R. '980, an amendment to Section 3250 (1) (5), of the Internal Revenue Code.

Chemical Specialties Mfrs. Assn. to Hold Aerosol Festival

The second annual Aerosol Festival, featuring an aerosol package contest, will be sponsored by the Chemical Specialties Mfrs. Assn. in conjunction with the 40th annual meeting December 7-8 at the Mayflower Hotel, Washington, D. C.

The competition has been divided into seven classes, including one for room deodorants and one for personal products, such as toiletries.

The judges selected so far include Mrs. Charlotte Montgomery of *Tide*, and Florin Hailer, vice-president of Rexall Drug Co. The other three judges will be a housewife, a retail merchant, and a designer.

The committee is composed of chairman Ira P. MacNair, MacNair-Dorland Co., publishers, Frank Zumbro, Dupont, and Fred Lodes, Presision Valve Corp.

Entire Sales Force Attends Coty Meeting

"Selling days are here again" was the theme of the recent Coty sales meeting in New York.

Presided over by Jean Despres, executive vice-president in charge of sales, it was attended by the entire sales force of 57 salesmen and by the supervisors.

Philip Cortney, president, and Grover A. Whalen, chairman of the board, addressed the meeting.

Especially honored were Joseph V. Bellavia, appointed to the newly created post of coordinator of Divisional operations of Cotymarie Earle-Lucien Lelong; Dean Hamilton Caziarc, newly appointed district manager of the Southwest

district; Henry F. Kriete West Coast district manager, who received a gold medal in honor of his 25 years with the firm; and Donald B. Clement, supervisor of sales agents, 20 years with Coty.

Sale of Lady Esther, Inc. Depends on Court Decision

Sale of Lady Esther, Inc. is contemplated, but pivots on the outcome of an expected decision by Cook Country Superior Court Judge Rudolph Desort as to control of the \$3,000,000 to \$5,000,000 estate of the late manufacturer Alfred H. Busiel. Contestants are his widow, Mrs. Suzette Busiel, and heir baby daughter, as one party; the other party is Miss Syma Busiel, sister of the deceased.

deVries Honored by Polak & Schwarz on 25th Anniversary

Charles de Vries, treasurer of Polak & Schwarz Inc. reached his 25th anniversary with the firm on September 14. He started as a sales representative of Polak & Schwarz in Zaandam, Holland, for Central and South America. During the war Mr. deVries took charge of the entire South American operation and since 1947 has been treasurer and director of Polak & Schwarz Inc., New York. A party to celebrate his association with the company for a quarter of a century was given in his honor in the New York office of the company.

Exclusive Erno Laszlo Outlet Appointed in Minneapolis

Maurice L. Rothschild, Young-Quinlan Co., Minneapolis, will handle Erno Laszlo preparations and services exclusively in that city.

Soap Sales Down, Synthetic Detergents Sales Up

Soap industry sales held steady during the first half of 1953. A gain of about 1% in tonnage over the same period last year was announced today by the Assn. of American Soap and Glycerine Producers, Inc. Eighty-five companies participating in the sales census reported sales of soap and synthetic detergents for the six months ending June 30 totaling 1,711,902,000 pounds as compared with 1,693,135,000 in 1959.

Reported sales of soaps only, solid and liquid, for the first six months amounted to 809,595,000 pounds, down 17% from the same period in 1952. Total synthetic detergent sales, solids and liquids were 902,307,000 pounds, an increase of 25% over the first half of 1952. They now represent 52.7% of the industry's sales of soaps and detergents.

Dollar sales of all soap and synthetic detergents for the half year amounted to \$365,163,000, an increase of 7% over this period last year. Dollar sales of soaps totaled \$159,168,000, down 12% from the first six months in 1952. Synthetic detergent dollar sales, up 30% totaled \$205,995,000.

New F.D.A. Plant Law Grants Agency Inspection Rights

The new F.D.A. factory inspection law permits the agency to inspect plants engaged in the production of foods, drugs, and cosmetics, but only at reasonable times, within reasonable limits, and in a reasonable manner. Trade circles believe that the working of the law is bound to result, sooner or later, in a court test.

The law also stipulates that the inspector must present his credent'als and a written notice to the owner, operator or agent in charge before starting the tour.

Rystan Co. Files Claim Against Colgate's Chlorophyll

The Rystan Co. has filed a counter-claim against Colgate-Palmolive Peet Co. Asking for a preliminary injunction to restrain the company's chlorophyll toothpaste operations. The action followed the filing of a suit by Colgate requesting a declaratory judgment voiding the Grushkin patent. Bristol-Myers recently dropped its suit against the Rystan Co., and has withdrawn its cancellation of its chlorophyll patent license agreement with the firm.



Joseph V. Bellavia, Coordinator of Divisional Operations of Coty-Marie Earle-Lucien Lelong, is congratulated by Coty president Philip Cortney during the recent Coty sales convention. Shown left to right are Ray Sanders, executive director of Marie Earle, Joseph Stein, president of Lucien Lelong, Philip Cortney, Joseph Bellavia, and Jean Despres, executive vice-president in charge of sales at Coty.

Miss Hazel Bishop Broadcasts and Lectures on Cosmetics

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Miss Hazel Bishop, whose brilliant success in the creation and manufacture of lipsticks is well known throughout the industry, answered questions about her career and discussed lipsticks in the American Chemical Society's "Headlines in Chemistry" program over radio station WNYC, August 13. Miss Bishop was interviewed by Roy Avery of the American Chemical Society's News Service.

In the interview, with her usual charm, Miss Bishop explained that she started out as a pre-medical student in college but the financial crash detoured her into continuing her graduate studies in chemistry in the evening while working during the day in the biochemical laboratories of the medical center. As an assistant to a famous dermatologist she tracked down the causes of cosmetic allergies; and while working during the war in the petroleum industry, as an organic chemist in oils and waxes, as a hobby she began formulating lipstick. Her lipstick with its distinctive merits proved to be very popular and so she was naturally catapulted into the cosmetic industry.

In discussing cosmetics Miss Bishop said "In this highly competitive world no modern woman will forego the advantages of good grooming which cosmetics can help her achieve whether her field be business, social activity or sport." The interview will later be broadcasted over more than 80 radio sca-

The many friends of Miss Bishop will be interested to learn that she has been reappointed chairman of the social committee of the Metropolian section of the American Chemical Society for the coming year. This section represents approximately 6,000 chemists, or about one-tenth of the total national membership of the society.

Miss Bishop will lecture on cosmetics at the meeting of the New York chapter of the Desk and Derrick Society, composed of nearly 500 women associated with the Petroleum industry in the New York area. The lecture will be given September 16 and will be followed by a dinner at which Miss Bishop will be the guest of honor.

Consolidated Products Absorbs Condenser Service, Engineering

Consolidated Products Co., Inc., New York, engineering and equipment firm, has acquired ownership



Part of the staff attending the Florasynth Labs. booth at the recent I.F.T. meeting (left to right): Bob DeMembler, New York division; Arth Fayne, New England and New York State; Eliot Friberg, East Coast Division Manager; Joseph H. Fein, treasurer; Jack N. Friedman, vice-president; Hal Johnson, mid-west; Ed Gehrke, Minnesota division.

of Condenser Service & Engineering, Co., Inc., Hoboken, N. J., and its various affiliated companies, representing assets of over \$3,000,000.

N.B.B.M.A. Convention Elects Officers for 1953-1954

The following new officers for 1953-1954 were elected at the recent 12th annual convention of the National Beauty and Barber Mfrs. Assn. in New York:

President, Karl H. Hamlok, Turner Hall Corp.; Ist vice-president, Robert R. Hoffman, Revlon Products Corp.; 2nd vice-president, Frank Rosendahl, Walla Corp.; 3rd vice-president, C. Van Housen, Scolding Locks Corp.; 4th vice-president, Clarence O. Long, Emil J. Paidar Co.; 5th vice-president, Mark L. Arend, Rayette, Inc.; secretary, Max C. Fogel, Quality Cosmetics Corp.; treasurer, Harold F. Bertrand, Turner Hall Corp.

The following directors were elected: Victor Arnao, Arthur M. Arthur, Harold F. Baldridge, George Barrie, Edward J. Breck, Ben F. Breslauer, W. H. H. Davis, E. A. Faust, Harry Fidel, Richard L. Gelb, Jule Gordon, James F. Gray, Edward Karp, Mrs. M. S. Mattson, James R. Miller, Miss Eleanor Murphy, Louis Naidech, Sheldon R. Odell, Arthur S. Posner, Frank J. Schaider, Phil D. Spaeth, Richard W. Stephan, J. H. Welsh, Ira S. Wilson.

City College of N.Y. Offers Cosmetics Retailing Course

An evening course in "Drug & Cosmetics Retailing" is being offered by the City College of New York for the fall semester. It is conducted by Prof. I. Greenberg of the Brooklyn College of Pharmacy.

Florasynth Labs. Introduces Products at I.F.T. Meeting

A wide line of product and ingredients was introduced by Florasynth Labs., Inc. in a dramatically presented exhibit at the recent Institute of Food Technologists' annual meeting and exposition in Boston.

Under the guidance of executives of the company, William Lakritz, Joseph H. Fein, David E. Lakritz and Jack Friedman, various division managers and district representatives, convened and attended both the booth and the Florasynth suite.

Boston BIMS Announces Winners of Midsummer Golf Outing

BIMS of Boston recently held their midsummer golf outing at the Dedham (Mass.) Country and Polo Club.

Golf prizes were won by C. F. Karkalits Jr., Gordon Mulligan, T. J. Conlon, R. Allen Gowdy, Jack I. Wanderwater, and H. C. Milton.

Door prizes went to William H. McGrath, Emory M. Wright; Dave W. Schornstein, H. S. Kishbaugh, and Richard I. Swanson. A special prize of an outdoor barbecue set was won by E. E. Aldrich of The Rexall Drug Co.

The final outing of the season was scheduled for September 15 at the Nashua (N. H.) Country Club, chairman Hart Harris, Jr. of S. B. Penick & Co. has announced.

Congress Committee Cuts Out Business Census Funds

Funds for the fourth business census, scheduled for this year, have been eliminated by the joint House and Senate conference on appropriation bills.

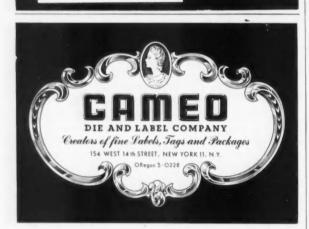


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Shampoo Manufacturers Freight Committee Organized

In order to secure a more favorable freight rate for shampoos, which hitherto have been classed as toilet preparations by having them reclassified as liquid soaps a shampoo manufacturers freight committee financed by the manufacturers has been organized. The executive committee consists of Edwark J. Breck, John H. Breck Inc., chairman; and G. D. Cederholm, Warner-Hudnut; Jule Gordon, J. B. Williams Co.; Karl Mam-Turner Hall Corp.; Edward Mathews, Affiliated Laboratories; Frank R. McDermott, Stephan Distributing Corp. and William Metzger, Sales Affiliates Inc. Harold F. Bertrand, 142 Fifth Ave., New York, N. Y. is secretary-treasurer.

Chemical, Allied Industries of Mich. Holds Fourth Golf Match

The Chemical & Allied Industries Assn. of Michigan held its fourth golf outing of the season on August 25 at the Pine Lake Country Club.

Hutchins and Keeley Honored by Philadelphia Cosmetic Assn.

Harold Hutchins, publisher of the Harold Hutchins Drug & Cosmetic News Letter and C. R. Keeley, advertising manager of Beauty Fashion were elected honorary members of the Philadelphia Cosmetic Assn. in recognition of their long and faithful services to the industry. A sterling silver honorary membership card was presented to each.

Among Our Friends

DANIEL W. McMANUS has been appointed general sales man-



Daniel W. McManus

ager for Milkmaid, Inc. He formerly was vice-president, Roger & Gallet U. S. A. and general sales manager of Elizabeth Arden of Canada Ltd.

KENNETH G. VOORHEES, president, and IVON H. BUDD, vice-president of Ungerer & Co., sailed on the S. S. "Liberté" in August to visit the various producing areas in England, Holland, France, Spain, Italy and Sicily. A survey will be made of crops and sources of supply of materials emanating from these countries. The return trip will be made on the S. S. "Andrea Doria" arriving in New York early in October.

LOUIS AMIC general manager of Etablissements Roure Bertrand Fils & Justin Dupont, Paris, Grasse and Argenteuil, France has been awarded the honor of being made a Chevalier of the Legion of Honor; and has also received the Croix de Guerre for



Louis Amic

eminent services and active participation in resistance during the last war. Mr. Amic is well known to the American industry for his many trips to this country on visits to Roure-Dupont, Inc., the American company. Mr. Amic's brother, Francois, was made a chevalier of Legion of Honor about two years ago.

LORRAINE ROBIN and MAD-ELINE LEIB have been appointed junior sales representatives for Tussy Cosmetiques.

WALTER LONG has joined the Dorothy Gray sales staff in the Southeast.

ROBERT F. FISKE, general manager of the Erno Laszlo Co., was recently married to MISS BEVERLY MARTIN, buyer of cosmetics at Bonwit Teller, New York department store. The wedding party included DR. and MRS. ERNO LASZLO.

ADOLPH DINGFELDER, export executive of Felton Chemical Co., left for France September 12 to represent Felton at the opening of new office and plant facilities of



Adolph Dingfelder

the company's French affiliate, Felton France, S. A. R. L., Versailles. While in Europe he will also address several foreign commercial groups.

DR. J. B. NAGLER has been named head of the research development and quality control laboratories of Lehn & Fink Products Corp.

GUSTAV CARSCH, Polak & Schwarz, accompanied by Mrs. Carsch are back from a European trip which included a visit to the parent company's plants in Hilversum and Zaandam, Holland.

ERIC VLES, Polaks Frutal Works, Middletown, N. Y. has returned from a vacation trip to Europe which included a visit to the company's offices in Amersfoort, Holland.

LUIS DE HOYOS, general manager of Synfleur Scientific Laboratories, Monticello, N. Y. is receiving congratulations on the birth of his first daughter August 10.

FRANK WILD has been named administrative vice-president at Lentheric, Inc. Other appointments are JAMES E. McMAHON as comptroller and RALPH C. ZEHNER as vice-president in charge of production and plant management.

H. R. M. GORDON, Guildcraft, New York, N. Y. has returned to his desk after attending the 150th anniversary of the landing of the Gordon pioneers on Prince Edward Island, Canada.

NELSON MILLARD has resigned as sales manager of the drug and department store division of Dermetics at Rilling Dermetics Co.

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This warm floral note, powerful and lasting, represents a remarkable synthesis of the Tuberose flower and is interesting in many modern compositions.

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J. van PAASSCHEN, general manager of N. V. Chemische Fabriek "Naarden," Holland, has been appointed director; and P. van AMELROOIJ and R. A. van der LAAKEN have been granted limited executive powers.

PIERRE COUTIN, president of the Essential Oil Assn. of the U. S. A. has returned from a three month's vacation trip in Europe. Much of the time was spent in Italy. About a week was spent in conference with executives of Roure Bertrand Fils-Justin Dupont, in Grasse, France. Mr. Coutin is well known as the general manager of the American company, Roure-Dupont, Inc., New York, N. Y.

LEO V. TALAMINI, executive vice-president of Parfums Schiaparelli, Inc., is in Paris, discussing with Mme. Schiaparelli fall promotion plans for the new Succes Fou perfume.

JOHN THOMPSON will manage a Toronto branch office which D & O is about to open. Sales staff additions include LOUIS MIGNACCA, in the New York

metropolitan area, and WILLIAM A. GRAY in the Chicago district.

WILLEM LASTHUYSEN, formerly with "Naarden" and the Great Atlantic & Pacific Tea Co., has been appointed to the Dodge & Olcott Flavor department. Another recent appointment to the department is CHARLES DWYER.

ELIZABETH ARDEN has accepted the chairmanship of the cosmetics division in the Sister Elizabeth Kenny Foundation's 1953 appeal for funds.

CHARLES EMERY, formerly merchandising manager of the Toilet Goods Division of Colgate-Palmolive-Peet Co., has established his own business, Charles Emery & Associates, Honolulu, Hawaii.

JOHN ROOSEVELT, president of "4711," and son of the late president, is expected to serve on the newly formed Government Contract Committee.

HANS KESSLER, sales manager of Givaudan-Flavors, Inc., has just returned from a four-week visit to Switzerland. During his European stay he visited the factory of L. Givaudan & Cie., S. A.

ALBERT J. GERATHY, previously with the Schering Corp. as plant manager, has joined Warner-Hudnut, Inc. as director of planning, procurement and distribution.

Obituary

Gustavus A. Pfeiffer

Gustavus A. Pfeiffer, former head of Richard Hudnut and chairman of William R. Warner Inc. died recently in Norwalk, Conn. at the age of 81 years. In 1901 with two brothers he organized the Pfeiffer Chemical Co. in St. Louis, Mo. That company purchased several pharmaceutical firms which were all absorbed into William R. Warner Co. when it was organized in 1908. Richard Hudnut was acquired later. Within the past few years the company was reorganized under the name of Warner Hudnut.

For many years Mr. Pfeiffer served the old Manufacturing Perfumers Assn. and later the American Manufacturers of Toilet Articles as a president or other officer and was almost continually on the board. He retired some years ago.

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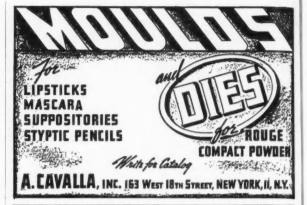
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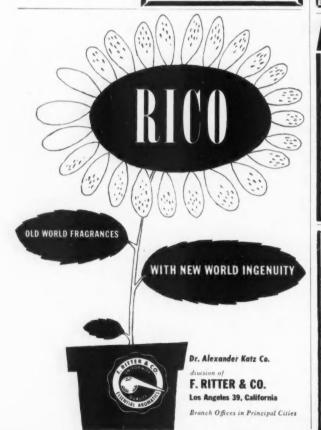
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Market Report

Basic Chemicals, Vanilla Strong

NFLUENCED by summer vacations, new crops, and turn of events in the international picture, the raw materials market, on the whole, presented a rather mixed tone over the past month.

Mint Oils Soft

Mint oils displayed a soft tone as distillation of the new crops of spearmint and peppermint got underway. Prices on both oils lost ground as it became apparent yields were very satisfactory. Some houses advised customers considering long term commitments to proceed with caution, suggesting that oils would possibly lose further ground before prices are stabilized. Clove bud oil, caraway, and na-

Clove bud oil, caraway, and native cananga oils moved lower. These reductions, however, were offset by advancing prices for vanilla beans and firmness in virtually all basic chemicals such as dried forms of caustic soda, chlorine, and boron chemicals.

While relatively quiet on the surface, the longer term outlook in glycerine is regarded as strong. Shrinkage in receipts of crude from abroad over the past few months as well as a seasonal drop in domestic production over the past month are factors which promise to have a strengthening influence upon the market by late September. While official figures for July were not yet completed at the close of last month, trade observers believe that stocks at the close of July will show a drop of approximately two million pounds. Some trade observers point out that a great deal will depend upon the extent of the demand in the Fall but August production of domestic crude was virtually all sold in the final week of July and a seasonal resumption of operations at many plants will undoubtedly bring about a more

active call for refined material in the weeks ahead. Some sales of domestic crude have been placed for September delivery. Argentina normally a large supplier of crude glycerin has failed to offer any material for many months. It was several months ago that estimates placed accumulated stocks in the country at over 1500 tons. It is quite possible that a good portion of its estimated accumulation will be exported to other countries.

Anticipated buying for the account of pharmaceutical manufacturers, toiletry manufacturers and makers of proprietaries for the Fall and Winter is expected to lift sales of an extended list of oils and aromatic chemicals, thus offsetting a drop in sales to confectioners, beverage manufacturers, and makers of pickling compounds. Inquiry for the account of perfumers and soap manufacturers is reported to be more active.

Rosin More Active

The rosin market displayed a greater amount of activity. Export trade turned more active for the first time in a long while. This in turn caused some concern among domestic consumers especially with regard to October forward requirements or during the non-producing months in the gum industry. Some houses attributed the spurt in export buying to recent turn of events in the world market. Portugal, normally an important supplier of rosin in Europe, was reported facing a sharp curtailment in production this year. Prices from Mexico and France turned firmer.

Vanilla Beans Firm

Advancing prices for vanilla beans were attributed to a good demand for the account of large extract manufacturers and generally reduced supplies in sight from France, Mexico and other producing areas because of poor crops. Only very limited amounts of Java vanilla beans were to be had on spot or for shipment. While some importers point out that there is likely to be increased evidence of buyer resistance to the hardening trend in values, the advance is likely to be further extended unless some relief in the supply position takes place. Offerings from Mada-gascar and Marseilles have been extremely limited over the past several months. Higher prices, it is believed, will prove the real test as to whether there is an actual shortage abroad or whether many exporters have just been holding back in the hope of getting a greater return for their holdings.

Demand for synthetic powdered camphor proved quite satisfactory in July. Sales about equaled those for the corresponding month last year, but the total movement for the first six months of the year was somewhat under that for the corresponding period in 1952. Normally the use of powdered camphor increases in the Fall when pharmaceutical manufacturers step up their requirements, thus it is quite possible the final half of the year will make a better showing than that noted in the first half. Camphor tablets have enjoyed a good demand over the past several

Spot prices for Japanese menthol remained firm over the past month, but quotations for natural menthol from Brazil lost considerable ground. The easier trend in the Brazilian product was attributed to devaluation in exchange and reports from Europe which indicated that Chinese exporters had been offering goods in the Continent at ridiculously low levels.

PRICES IN THE NEW YORK MARKET

(Quotations on these pages are those made by local dealers, but are subject to revision without notice)

ESSENTIAL OILS		Cloves, from buds Leaf	9,00@ 1,50@	10.00	Marjoram 2.25@ Neroli—	3,20
All prices per lb. unless otherwise	speci-	Copaiba	2.10@	2.35	Haitian 75,00@	100.00
fied.	- K	Coriander		25.00	French	270.00
		Croton	4.35@	5.25	Nutmeg, East Indies 3.00@	3.65
Almond Bit, FPA per lb. 3.40@	3.80	Cumin	4.2560	5.20	Ocotea Cymbarum65@	.90
Sweet True5860	.90	Dill—			Olibanum 5.60@	7.85
Apricot Kernel	.60	Weed	3.8560	4.60	Opopanax 45,00@	48.00
Amyris 1.70@	2.00	Seed, Indian	2.9060	3.40	Orange, Florida85@	1.10
Angelica Root 68.00@	100.00	Erigeron	6.00@	6.85	Italian 3,90@	5.50
Angelica Seed 55,00@	90.00	Eucalyptus—	0,000	0.00	Calif., exp 1.25@	
Anise, U.S.P 2.25@	3.00	80-85%	.90@	1.20	Distilled	Acres .
Bay 1.50@	2.10	70-75%	.7500	1.25	Origanum 2.15@	2.85
Bergamot 11.25@	14.25	Fennel, Sweet	2.4000	3.00	Orris Root, concrete (oz.) 6,50@	8.75
Artificial 3.00@	4.25	Garlie (oz.)	9.00@	11.00	Concrete, extra 12.00	15.00
Birchtar, crude 1.80@	2.10	Grapefruit	2.9060	3.30	Patchouli 7,50@	10.00
Birchtar, rectified 2.55@	2.85	Geranium, Rose, Algerian	9,5000	11.75	Pennyroyal, European 2.00@	2.50
Bois de Rose 4.00@	4.75		11.50@	12.00	Peppermint natural 4.65@	5.00
Cajeput U.S.P 2.20@	2.75	Turkish	6.00@	6.75	Redistilled 5.10@	5.70
Cajeput (technical) 1.75@	2,20	Ginger		13.50	Petitgrain 2,35@	2.85
Calamus 20,00@	22.00	Guaiac (Wood)		1.75	Pimento, Berry 4.50@	5.15
Camphor "White" ,25(a)	.42	Hemlock	2.15@	2.75	Leaf 2.40@	2.90
Cananga, native 10.2561	11.00	Jasmin2		300.00	Pinus Sylvestris 2,406a	2.85
Rectified 12.15@	12.75	Juniper Berry		3.50	Pumilio 3.15@	4.00
Caraway 2,00%	2.85	Laurel leaf	9.85@	12.60	Rose, Bulgaria (oz.) 55.00@	70,00
Cardamon 32.5061	40.00		2.15@	3.00	Synthetic, lb 30,00@	35,00
Cascarilla 35.00@	40.00	LavandinLavender, French—	2.1300	5.60	Rosemary, Spanish65@	.95
Cassia, rectified, U.S.P 7.2561	8.00		5.7561	7.35	Sage—	.70
Cedar leaf, U.S.P 2.15@	3.00	40-42% ester	3,30@	4.80	Spanish	1.25
Cedar Wood	.60	30-32% ester Spike	1.60@	2.00	Dalmatian 6.50@	8,35
Celery 16.50@	20.00	Spike Lemon, Calif	7.256	7.50	Sandalwood, N. F 10.00@	10.75
	255.00				Sassafras—	10.73
Cinnamon—	200,00	Italian	6.75@	9,00		**
Bark 22.00@	40.00	Lemongrass	1.05@	1.30	Artificial	,65
	3.00	Limes, distilled		7.40	Snake root 30.50@	32,00
	.90	Expressed		9.50	Spearmint 7.20@	7,85
	1.00	Linaloe wood	3.7561	4.15	Spruce 2.25@	2.75
			10.00@	12.00	Sweet birch Southern 2.10@	3.00
Java type	,65	Mace	2.75@	3.85	Northern 4.95@	8.00
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Tomar	8.35@	9.00	Ethul Propionate	006	1.00	Dismuth subsituate 9.65@	
Tansy		2.85	Ethyl Propionate Ethyl Salicylate	.90@ 1.85@		Bismuth, subnitrate 2.65@ Borax, crystals, carlot ton 67.25@	91.75
White		3.40	Ethyl Vanillin			Boric Acid pwd. U. S. P.,	71.43
Valerian, extra		125.00				ton	153.75
Vetivert—	too.ooat	123,00	Eugenol			Calaire Dhambar 073/60	.081/4
Bourbon	17 1000	20.50				Calcium, Phosphate0734@	.00 74
Haitian		18.75	Geranoil, dom			Phosphate, tri-basic075/8@	
Java			Geranyl Acetate			Camphor, pwd., domestic .5760	17.00
		31.50	Geranyl Butyrate Geranyl Formate		4.85	Castoreum, nat., cans 7.25@	17.00
Wintergreen, Southern		15.00		4.50@	4.95 6.75	Cetyl, Alcohol, extra78@	.80
Northern		14,00	Geranyl valerianate	6.00@		Chalk, precip. bags, clts02 %	.03
Wormseed		9.25	Guaiac Wood Acetate	4.6561	5.00	Cherry Laurel Water, jug,	NI 11
Wormwood		6.40 32.50	Heliotropin, dom	3.400	3.85		Nom'l.
Ylang Ylang, Bourbon			Hydrotropic Aldehyde	5.90@	6,35	Citric Acid Anhydrous 2834@	.311/4
Haitian	12.00@	Nom 1.	Hydroxycitronellal	5.400	5.85	Civet, ounce 5.50@	10.00
TERPENELESS O	MIS		Indol, C. P	19,00@	19.50	Cocoa butter	.76
	- 111		Iso-borneol	1.65@	1.80	Cyclohexanol (Hexalin)34½@	.35
Bay	3.00@	3.60	Iso-butyl Acetate	,85@	1.50	Dextrine, white, cwt 8.53@	8.68
Bergamot		29,00	Iso-butyl Benzoate	1.65@	1.85	Fuller's Earth, Mines ton . 27.00@	30.00
Grapefruit		90,00	Iso-butyl Salicylate	2.15@	3.00	Glycerin, C. P	.443/4
Lavender	10.00@	14.25	Iso-eugenol	4.10@	4.85	Soap Lye crude 31@	.32
Lemon		70,00	Iso-safrol	2,100	2.80	Gum Arabic, white pwd40@	.45
Lime, ex		90,00	Linalool		6.25	Amber	.15
Distilled	60.00@	62.00	Linalyl, Acetate 92%		6.75	Gum Benzoin, Siam 3.50@	3.85
Orange sweet1	10.00@	135.00	75%		6.10	Sumatra	.45
Peppermint		14.65	Linalyl Benzoate		20.00	Gum Galbanum	.95
Petitgrain	5.25@	6.10	Linalyl Formate		12.85	Gum karaya, pwd18@	.30
Spearmint	13.00@	15.50	Linalyl Propionate	12.00@	13.80	Gum Myrrh	.40
DEDISTATISES AND CO	TEME		Menthol—	= =0.0		Henna, pwd	.30
DERIVATIVES AND CH	HEMIC	ALS	Brazilian	5,500	5.75	Kaolin	.07
Acetaldehyde 50%	2.15@	2,50	Japanese	7.50@	7.60	Labdanum 3.70@	4.50
Acetophenone	1.40@	1.80	Racemic	4.95@	5.10	Lanolin, cosmetic 38½@	$.48\frac{1}{2}$
Alcohol C 8	1.95@	2.25	Methyl Anthranilate	2.40@	2.65	Anhydrous	.38
C 9		13.00	Methyl Anthranilate extra	2.75@	3.10	Magnesium, carbonate111/4@	.14
C 10		2.30	Methyl Benzoate	,5500	1.25	Stearate	.43
C 11		14.50	Methyl Cinnamate	1.7500	2.25	Musk, ounce 65.00@	
C 12		3,50	Methyl Heptenone	5.2000	5.85	Olibanum, tears20@	.25
Aldehyde C 8		11.00	Methyl Heptine Carbonate		40,00	Siftings	.18
C 9		17.10	Methyl Naphthyl Ketone .	3.85@	4.10	Orange Flower Water,	
C 10		7.75	Methyl Phenylacetate	1.1000	1.75	gal 1.75@	2.25
C 11		20.00	Methyl Salicylate	.58@	.65	Orris Root. Italian23@	.28
C 12		15.75	Musk Ambrette	5.25@	5.45	Paraffin, fully ref. 122-124 .07%@	.08
C 14 (Peach so-called)	6.85@	7.50	Ketone	5.3500	5.60	Peroxide (hydrogen U. S. P.)	
C 16 (Strawberry	0100	1.00	Xylene	1.40@	1.65	bbls	.05
so-called)	5.85@	6.20	Neroline (ethyl ether)	2.5000	2.80	Petrolatum, snow white06\%@	.08 %
			Octyl Isobutyrate		5.30	Quince Seed 1.00@	1.50
Amyl Acetate	.55@	.70	Paracresyl Acetate	2.20@	2.75	Rice Starch	.18
Amyl Acetate	.55@ 1.00@	.70 1.25	Paracresyl Acetate Paracresyl Methyl Ether .	2.20@ 2.10@	2.75 2.75	Rice Starch	.18 .90
Amyl Acetate	.55@ 1.00@ 2.05@	.70 1.25 2.40	Paracresyl Acetate Paracresyl Methyl Ether . Paracresyl Phenylacetate	2.20@ 2.10@ 4.60@	2.75 2.75 5.20	Rice Starch	.18 .90 1.85
Amyl Acetate	.55@ 1.00@ 2.05@ 1.00@	.70 1.25 2.40 1.25	Paracresyl Acetate Paracresyl Methyl Ether .	2.20@ 2.10@ 4.60@ 2.75@	2.75 2.75 5.20 3.25	Rice Starch	.18 .90 1.85 8.55
Amyl Acetate	.55@ 1.00@ 2.05@ 1.00@ 3.75@	.70 1.25 2.40 1.25 4.10	Paracresyl Acetate Paracresyl Methyl Ether . Paracresyl Phenylacetate	2.20@ 2.10@ 4.60@ 2.75@ 4.10@	2.75 2.75 5.20 3.25 4.65	Rice Starch	.18 .90 1.85 8.55 .53
Amyl Acetate	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@	.70 1.25 2.40 1.25 4.10 1.60	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid	2,20@ 2,10@ 4,60@ 2,75@ 4,10@ 1,65@	2.75 2.75 5.20 3.25 4.65 2.25	Riee Starch .16@ Rose Flower, pale .65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. .840@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@	.18 .90 1.85 8.55
Amyl Acetate Amyl Butyrate Amylcinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ .90@	.70 1.25 2.40 1.25 4.10	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate	2.20@ 2.10@ 4.60@ 2.75@ 4.10@ 1.65@ 1.60@	2.75 2.75 5.20 3.25 4.65 2.25 1.95	Riee Starch 16@ Rose Flower, pale 656@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 2.75@ Silicate, 40° drums, works,	.18 .90 1.85 8.55 .53 2.80
Amyl Acetate Amyl Butyrate Amylcinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ .90@ 1.95@	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol	2.20@ 2.10@ 4.60@ 2.75@ 4.10@ 1.65@ 1.60@ 1.65@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90	Riee Starch .16@ Rose Flower, pale .65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. .8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@	.18 .90 1.85 8.55 .53
Amyl Acetate Amyl Butyrate Amylcinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ .90@ 1.95@ 1.00@	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40 1.35	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate	2.20@ 2.10@ 4.60@ 2.75@ 4.10@ 1.65@ 1.60@ 1.65@ 4.20@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.50	Riee Starch .16@ Rose Flower, pale .65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 1.70@	.18 .90 1.85 8.55 .53 2.80
Amyl Acetate Amyl Butyrate Amylcinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ .90@ 1.95@ 1.00@ 2.15@	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40 1.35 2.65	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Propionate	2.20@ 2.10@ 4.60@ 2.75@ 4.10@ 1.65@ 1.60@ 1.65@ 4.20@ 3.40@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.50 4.00	Riee Starch 16@ Rose Flower, pale 650@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 4.8@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@	.18 .90 1.85 8.55 .53 2.80
Amyl Acetate Amyl Butyrate Amylcinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ .90@ 1.95@ 1.00@ 2.15@ 6.00@	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40 1.35 2.65 6.75	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Propionate Phenylethyl Salicylate	2.20@ 2.10@ 4.60@ 2.75@ 4.10@ 1.65@ 1.65@ 4.20@ 3.40@ 4.35@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.50 4.80	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 100 pounds 1.70@ Sodium Carb, 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 4.75@	.18 .90 1.85 8.55 .53 2.80 2.30
Amyl Acetate Amyl Butyrate Amylcinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ .90@ 1.95@ 1.00@ 2.15@ 6.00@ .75@	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40 1.35 2.65 6.75 .85	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Propionate Phenylethyl Salicylate Phenylethyl Valerianate	2.20@ 2.10@ 4.60@ 2.75@ 4.10@ 1.65@ 1.65@ 4.20@ 3.40@ 4.35@ 5.80@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.50 4.80 6.10	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds J00 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ .90@ 1.95@ 1.00@ 2.15@ 6.00@ .75@ .75@	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40 1.35 2.65 6.75	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Propionate Phenylethyl Salicylate Phenylethyl Valerianate Phenylpropyl Acetate	2.20@ 2.10@ 4.60@ 2.75@ 4.10@ 1.65@ 1.65@ 4.20@ 3.40@ 4.35@ 5.80@ 3.30@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.50 4.80 6.10 3.85	Riee Starch 16@ Rose Flower, pale 650@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt. 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52 4.90
Amyl Acetate Amyl Butyrate Amyl Cimnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Benzoate	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ .90@ 1.95@ 1.00@ 2.15@ 6.00@ .75@ .75@ .85@	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40 1.35 2.65 6.75 .85 .85 1.00	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Propionate Phenylethyl Salicylate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Alcohol	2.20@ 2.10@ 4.60@ 2.75@ 4.10@ 1.65@ 4.20@ 4.20@ 4.35@ 4.35@ 5.80@ 3.30@ 2.70@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.50 4.80 6.10 3.85 3.20	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.9@ Styrax Asiatie 72@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52
Amyl Acetate Amyl Butyrate Amylcinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Benzoate Benzyl Butyrate	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ 1.95@ 1.00@ 2.15@ 6.00@ .75@ .85@ 1.75@	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40 1.35 2.65 6.75 .85 1.00 2.00	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Propionate Phenylethyl Salicylate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Alcohol Safrol	2.20@ 2.10@ 4.60@ 2.75@ 4.10@ 1.65@ 1.65@ 4.20@ 3.40@ 4.35@ 5.80@ 2.70@ 80@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.50 4.80 6.10 3.85 3.20 1.25	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt. 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic .72@ Tartaric Acid (250 lb.	.18 .90 1.85 8.55 .53 2.80 2.30 4.52 4.90 .78
Amyl Acetate Amyl Butyrate Amyl Butyrate Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Butyrate Benzyl Butyrate Benzyl Ginnamate	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ .90@ 1.95@ 1.00@ 2.15@ 6.00@ .75@ .75@ .85@	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40 1.35 2.65 6.75 .85 .85 1.00	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Alcohol Safrol Scatol (oz.)	2.20@ 2.10@ 4.60@ 2.75@ 1.65@ 1.65@ 4.20@ 4.35@ 5.80@ 3.30@ 2.70@ 80@ 2.65@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.50 4.80 6.10 3.85 3.20 1.25 3.40	Riee Starch 16@ Rose Flower, pale 656@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic 72@ Tartaric Acid (250 lb. drums) 37@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52 4.90 .30 .78
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Cinnamate Benzyl Formate	.55@ 1.00@ 2.05@ 1.00@ 1.00@ 1.25@ .90@ 1.95@ 1.00@ .75@ .75@ .85@ 1.75@ 1.75@ 3.75@	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40 1.35 2.65 6.75 .85 1.00 2.00 4.00	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Alcohol Safrol Scatol (oz.) Styrolyl Acetate	2.20@ 2.10@ 4.60@ 2.75@ 1.65@ 1.65@ 4.20@ 4.35@ 5.80@ 3.30@ 2.70@ 80@ 2.65@ 1.75@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.00 4.80 6.10 3.85 3.20 1.25 3.40 2.50	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 2.75@ Hydroxide, 76% solid, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.9@ Styrax Asiatie 7.2@ Tartaric Acid (250 lb. drums) 37@ Tragacanth, No. 1 2.75@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52 4.90 .30 .78
Amyl Acetate Amyl Butyrate Amyl Butyrate Amyl Formate Amyl Formate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzophenone Benzophenone Benzyl-isoeugenol	.55@ 1.00@ 2.05@ 1.00@ 1.25@ .90@ 1.95@ 1.95@ 2.15@ .75@ .85@ 1.75@ 3.75@ 1.75@	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40 1.35 2.65 6.75 .85 1.00 2.00 4.00 2.10	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylptyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Safrol Scatol (oz.) Styrolyl Acetate Thymol, crystals	2.20@ 2.10@ 4.60@ 4.10@ 1.65@ 1.65@ 4.20@ 3.40@ 4.35@ 5.80@ 2.70@ 80@ 2.65@ 1.75@ 3.10@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.00 4.80 6.10 3.85 3.20 1.25 3.40 2.50 3.25	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic .72@ Tartaric Acid (250 lb. drums) 37@ Tragacanth, No. 1 2.75@ Triethanolamine 26½@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52 4.90 .30 .78 .41 3.20 .27½
Amyl Acetate Amyl Butyrate Amyl Formate Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Valerinate Amyl Valerinate Annyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Acetate Benzyl Benzoate Benzyl Butyrate Benzyl Cinnamate Benzyl Formate Benzyl Formate Benzyl Formate	.55@ 1.00@ 1.00@ 1.00@ 3.75@ 1.25@ .90@ 1.95@ 2.15@ 6.00@ .75@ .85@ 1.75@ 1.75@ 1.50@ 1.80@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.00 4.00 2.10 2.25	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Safrol Scatol (oz.) Styrolyl Acetate Thymol, crystals Vanillin, eugenol	2.20@ 2.10@ 4.60@ 2.75@ 4.10@ 1.65@ 1.65@ 3.40@ 4.35@ 3.30@ 2.70@ 80@ 2.65@ 1.75@ 3.10@ 6.50@	2.75 2.75 5.20 3.25 4.65 1.95 1.95 4.00 4.80 4.80 3.85 3.20 1.25 3.40 2.50 3.25 7.25	Riee Starch 16@ Rose Flower, pale 656@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic 72@ Tartaric Acid (250 lb. drums) 37@ Tragacanth, No. 1 2.75@ Triethanolamine 26¼@ Zinc stearate, U.S.P. 37@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52 4.90 .30 .78 .41 3.20 .271/4 .42
Amyl Acetate Amyl Butyrate Amyl Commander Amyl Formate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Angl Valerinate Angl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzophenone Benzopl-isoeugenol	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ 1.95@ 1.95@ 1.00@ 2.15@ 6.00@ .75@ .75@ 3.75@ 1.50@ 1.80@ 1.80@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.00 2.10 2.10 2.25 1.025	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Alcohol Safrol Scatol (oz.) Styrolyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol)	2.20@ 2.10@ 4.60@ 2.75@ 4.10@ 4.10@ 4.65@ 4.20@ 3.40@ 4.35@ 3.30@ 2.65@ 1.75@ 3.10@ 6.50@ 3.00@	2.75 2.75 5.20 3.25 4.67 2.25 1.95 1.90 4.00 4.80 6.10 3.85 3.20 1.25 3.40 2.50 3.25 7.25 3.25	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic .72@ Tartaric Acid (250 lb. drums) 37@ Tragacanth, No. 1 2.75@ Triethanolamine 26½@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52 4.90 .30 .78 .41 3.20 .27½
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl-isoeugenol Benzyl Propionate	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ .90@ 1.95@ 1.95@ 1.75@ .75@ .85@ 1.75@ 1.50@ 1.80@ 1.80@ 1.80@ 1.80@ 1.80@ 1.80@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 6.75 .85 1.00 2.00 4.00 2.10 2.25 10.25	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Thenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin	2.20@ 2.10@ 2.10@ 4.60@ 4.10@ 4.10@ 4.165@ 4.20@ 4.35@ 5.80@ 3.30@ 3.10@ 6.50@ 3.00@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.80 6.10 3.85 3.20 1.25 3.40 2.50 3.25 7.25 3.25 7.25 3.25	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic 72@ Tartaric Acid (250 lb. drums) 37@ Tragacanth, No. 1 2.75@ Triethanolamine 264@ Zinc stearate, U.S.P. 37@ Oxide, U.S.P. 174@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52 4.90 .30 .78 .41 3.20 .271/4 .42
Amyl Acetate Amyl Butyrate Amyl Cimnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Valerinate Amyl Valerinate Annil Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Acetate Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl-isoeugenol Benzyl Propionate Benzyl Salicylate	.55@ 1.00@ 1.00@ 1.00@ 1.00@ 1.25@ 1.25@ 1.95@ 1.95@ 1.95@ 1.75@ 1.75@ 1.75@ 1.80@ 1.80@ 1.60@ 1.60@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.00 4.00 2.10 2.25 10.25 2.20 2.10	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Safrol Scatol (oz.) Styrolyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate	2.20@ 2.10@ 4.60@ 4.60@ 4.10@ 4.10@ 4.165@ 4.20@ 3.30@ 2.70@ 2.65@ 4.35@ 6.50@ 3.00@ 4.75@ 4.75@ 4.75@ 4.75@ 4.75@	2.75 2.75 5.20 3.25 4.65 1.95 1.90 4.00 4.80 6.10 3.85 3.20 3.25 3.40 2.55 7.25 3.25 3.25 3.25 3.25	Riee Starch 16@ Rose Flower, pale 656@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic 72@ Tartaric Acid (250 lb. drums) 37@ Tragacanth, No. 1 2.75@ Triethanolamine 26¼@ Zinc stearate, U.S.P. 37@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52 4.90 .30 .78 .41 3.20 .271/4 .42
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Salicylate Benzyl Salicylate Benzyl Salicylate Benzylidene Acetone Bromstyrol	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ 1.95@ 1.95@ 1.95@ 6.00@ .75@ .85@ 1.75@ 1.50@ 1.80@ 1.60@ 1.60@ 1.60@ 1.90@ 2.00@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 6.75 .85 1.00 2.10 2.20 2.10 2.25 2.20 2.10 2.75 6.35	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Butyrate Phenylethyl Propionate Phenylethyl Salicylate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.10@ 4.165@ 4.20@ 4.35@ 4.35@ 2.70@ 8.00@ 2.70@ 3.10@ 6.50@ 3.10@ 4.75@ 3.00@ 47.50@	2.75 2.75 5.20 3.25 4.67 2.25 1.95 1.95 4.00 4.80 6.10 3.85 3.20 1.25 3.25	Riee Starch 16@ Rose Flower, pale 650@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic 72@ Tartaric Acid (250 lb. drums) 37@ Tragacanth, No. 1 2.75@ Triethanolamine 264@ Zinc stearate, U.S.P. 37@ Oxide, U.S.P. 174@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52 4.90 .30 .78 .41 3.20 .271/4 .42
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Salicylate Benzyl Salicylate Benzyl Salicylate Benzylidene Acetone Bromstyrol	.55@ 1.00@ 1.00@ 1.00@ 1.00@ 1.25@ 1.25@ 1.95@ 1.95@ 1.95@ 1.75@ 1.75@ 1.75@ 1.80@ 1.80@ 1.90@ 1.90@ 1.90@ 1.43%@ 1.43%@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.00 2.10 2.25 2.20 2.10 2.75	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Safrol Scatol (oz.) Styrolyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate	2.20@ 2.10@ 4.60@ 4.60@ 4.10@ 4.10@ 4.165@ 4.20@ 3.30@ 2.70@ 2.65@ 4.35@ 6.50@ 3.00@ 4.75@ 4.75@ 4.75@ 4.75@ 4.75@	2.75 2.75 5.20 3.25 4.65 1.95 1.90 4.00 4.80 6.10 3.85 3.20 3.25 3.40 2.55 7.25 3.25 3.25 3.25 3.25	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic 72@ Tartaric Acid (250 lb. drums) 37@ Triethanolamine 2.264@ Zinc stearate, U.S.P. 37@ Oxide, U.S.P. 17½@	.18 .90 .1.85 .53 2.80 2.30 4.52 4.90 .30 .78 .41 3.20 2.271/4 .42 .181/4
Amyl Acetate Amyl Butyrate Amyl Butyrate Amyl Formate Amyl Formate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Salicylate Benzyl Salicylate Benzyl Salicylate Benzyl Getone Bromstyrol Butyl Acetate, normal Cinnamic Alcohol	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ 1.95@ 1.95@ 1.95@ 6.00@ .75@ .85@ 1.75@ 1.50@ 1.80@ 1.60@ 1.60@ 1.60@ 1.90@ 2.00@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 6.75 .85 1.00 2.00 4.00 4.25 10.25 10.25 2.10 2.75 2.10 2.75 3.5 1.5½	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Butyrate Phenylethyl Propionate Phenylethyl Salicylate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.10@ 4.165@ 4.20@ 4.35@ 4.35@ 2.70@ 8.00@ 2.70@ 3.10@ 6.50@ 3.10@ 4.75@ 3.00@ 47.50@	2.75 2.75 5.20 3.25 4.67 2.25 1.95 1.95 4.00 4.80 6.10 3.85 3.20 1.25 3.25	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic 72@ Tartaric Acid (250 lb. drums) 37@ Triethanolamine 261/@ Zinc stearate, U.S.P. 37@ Oxide, U.S.P. 171/@ OILS AND FATS Castor, refined, drums 24½@	.18 .90 .1.85 .53 2.80 2.30 4.52 4.90 .30 .78 .41 3.20 2.271/4 .42 .181/4
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Valerinate Amyl Valerinate Annyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Forponate Benzyl Salicylate Benzyl Salicylate Benzyl Salicylate Benzyl Salicylate Benzylidene Acetone Bromstyrol Butyl Acetate, normal	.55@ 1.00@ 2.05@ 1.00@ 1.25@ 1.25@ 1.90@ 1.95@ 1.95@ 2.15@ 6.00@ .75@ 3.75@ 1.50@ 1.85@ 1.80@ 1.80@ 1.90@ 1.90@ 1.90@ 2.00@ 5.75@ 2.75@ 2.75% 2.75%	.70 1.25 2.40 1.25 4.10 1.60 1.00 2.40 1.35 2.65 6.75 .85 1.00 2.00 2.10 2.25 10.25 2.20 2.10 2.75 6.35 .15 ½ 3.50	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Butyrate Phenylethyl Propionate Phenylethyl Salicylate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.10@ 4.165@ 4.20@ 4.35@ 4.35@ 2.70@ 8.00@ 2.70@ 3.10@ 6.50@ 3.10@ 4.75@ 3.00@ 47.50@	2.75 2.75 5.20 3.25 4.67 2.25 1.95 1.95 4.00 4.80 6.10 3.85 3.20 1.25 3.25	Riee Starch 16@ Rose Flower, pale 6.56@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 4.8@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.9@ 2.75@ Styrax Asiatic 7.2@ Tartaric Acid (250 lb. drums) 3.7@ Triethanolamine 261/@ Zinc stearate, U.S.P. 3.7@ Oxide, U.S.P. 1.71/@ OILS AND FATS Castor, refined, drums 2.41/@ Coconut, crude, Atlantic ports, tanks 1.51/@ Refined, drums 2.3@	.18 .90 1.85 8.55 .53 2.80 2.30 4.52 4.90 .30 .78 .41 3.20 2.71/4 .42 .181/4
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Propionate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Acetate Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Salicylate Benzyl Salicylate Benzyl Salicylate Benzylidene Acetone Bromstyrol Butyl Acetate, normal Cinnamic Alcehol Cinnamic Alcehol Cinnamic Alcehyde	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ 1.90@ 1.95@ 1.95@ 1.95@ 1.95@ 3.75@ 3.75@ 1.50@ 1.50@ 1.60@ 1.60@ 1.90@ 1.90@ 2.00@ 5.75@ 1.43%@ 2.75@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 6.75 .85 1.00 2.10 2.10 2.25 2.20 2.10 2.75 6.35 1.5½ 3.56 1.40	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether)	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.10@ 4.165@ 4.20@ 4.35@ 4.35@ 2.70@ 8.00@ 2.70@ 3.10@ 6.50@ 3.10@ 4.75@ 3.00@ 47.50@	2.75 2.75 5.20 3.25 4.67 2.25 1.95 1.95 4.00 4.80 6.10 3.85 3.20 1.25 3.25	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 2.75@ Hydroxide, 76% solid, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.2@ Styrax Asiatic .72@ Tartaric Acid (250 lb. drums) 37@ Tragacanth, No. 1 2.75@ Triethanolamine .26½@ Zinc stearate, U.S.P. .37@ Oxide, U.S.P. .17½@ OILS AND FATS Castor, refined, drums .24½@ Coconut, crude, Atlantic ports, tanks .15¼@ Refined, drums .23@ Corn, crude, Midwest,	.18 .90 .1.85 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .2714 .42 .1814 .25 .16
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisic Aldehyde Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Benzoate Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Salicylate Benzyl Salicylate Benzyl Salicylate Benzyl Salicylate Benzyl Getone Bromstyrol Butyl Acetate, normal Cinnamic Alcohol Cinnamic Aldehyde Cinnamic Aldehyde Cinnamic Aldehyde Citral, C. P. Citronellol	.55@ 1.00@ 2.05@ 1.00@ 3.75@ 1.25@ 1.90@ 1.95@ 1.95@ 1.95@ 1.95@ 3.75@ 3.75@ 1.50@ 1.60@ 1.60@ 1.60@ 1.90@ 2.75@ 3.75@ 3.75@ 3.75@ 3.75@ 3.75@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 6.75 .85 1.00 2.00 4.00 2.25 10.25 10.25 10.25 10.25 10.25 10.25 10.25 10.25 10.26 2.10 2.10 2.10 2.10 2.10 2.10 2.10 2.10	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Scatol (oz.) Styrolyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans	2.20@ 2.10@ 2.15@ 4.60@ 2.75@ 4.10@ 1.65@ 1.65@ 3.40@ 4.35@ 3.30@ 2.65@ 1.75@ 3.00@ 3.00@ 47.50@ 9.90@ 2.35@	2.75 2.75 5.20 3.25 4.65 2.25 1.95 1.90 4.00 4.80 6.10 3.85 3.20 2.50 3.25 7.25 3.25 7.25 3.25 3.26 3.26 3.27 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28	Riee Starch 16@ Rose Flower, pale 650@ Rose Flower, pale 650@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.9@ Styrax Asiatic 72@ Tartaric Acid (250 lb. drums) 37@ Tragacanth, No. 1 2.75@ Triethanolamine 2.264@ Zinc stearate, U.S.P. 37@ Oxide, U.S.P. 17½@ OlLS AND FATS Castor, refined, drums 2.4½@ Coconut, crude, Atlantic ports, tanks 1.5½@ Refined, drums 2.3@ Corn, crude, Midwest, mill, tanks 1.4½@	.18 .90 .185 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .271/4 .42 .181/4 .25 .16 .231/2 .141/2
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Popionate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Salicylate Benzyl Salicylate Benzyl Salicylate Benzyl Formate Benzyl	.55@ 1.00@ 1.00@ 1.00@ 3.75@ 1.25@ 1.95@ 1.95@ 1.95@ 1.75@ 3.75@ 1.80@ 1.80@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.25@ 1.25@ 3.75@ 3.75@ 3.75@ 3.75@ 3.75@	$\begin{array}{c} .70 \\ 1.25 \\ 2.40 \\ 1.25 \\ 4.10 \\ 1.60 \\ 2.40 \\ 1.35 \\ 6.75 \\ .85 \\ 1.00 \\ 2.00 \\ 4.00 \\ 2.10 \\ 2.25 \\ 10.25 \\ $	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans Bourbon	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.15@ 4.16@ 4.165@ 4.20@ 4.35@ 4.35@ 2.70@ 8.00@ 1.75@ 3.10@ 4.750@ 3.00@ 4.750@ 2.35@ 5.25@	2.75 2.75 5.20 3.25 4.65 1.95 1.95 4.00 4.80 6.10 3.85 3.20 1.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25 3	Riee Starch 16@ Rose Flower, pale 65@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 4.80@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.20 Styrax Asiatic 7.20 Tartaric Acid (250 lb. drums) 37@ Triegacanth, No. 1 2.75@ Triethanolamine 261/@ Zinc stearate, U.S.P. 37@ Oxide, U.S.P. 171/@ OILS AND FATS Castor, refined, drums 241/@ Coconut, crude, Atlantic ports, tanks 151/@ ports, tanks 151/@ Refined, drums 23@ Corn, crude, Midwest, mill, tanks 111/@ Corn Oil, refined, tanks 17%@	.18 .90 .1.85 .8.55 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .2.714 .42 .1814 .25 .16 .231/2 .141/2 .173/4
Amyl Acetate Amyl Butyrate Amyl Butyrate Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisiy Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Butyrate Benzyl Rectate Citronellyl Acetate Citronellyl Acetate Citronellyl Butyrate	.55@ 1.00@ 2.05@ 1.00@ 1.25@ 1.25@ 1.90@ 1.95@ 1.95@ 1.95@ 1.75@ 3.75@ 1.55@ 1.80@ 2.00@ 1.90@ 2.75% 1.255@ 3.75% 1.25%	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.00 2.10 2.25 10.25 2.20 2.10 2.75 6.35 1.51 2.75 6.35 1.53 2.40 4.50 3.70 2.30 3.00 3.00	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetate Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans — Bourbon Mexican, cut	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.10@ 4.10@ 4.165@ 4.20@ 4.35@ 4.35@ 2.70@ 3.00@ 3.00@ 47.50@ 3.00@ 47.50@ 2.35@ 5.25@ 4.90@	2.75 2.75 5.20 3.25 4.61 2.25 1.95 1.90 4.00 4.80 6.10 3.85 3.20 1.25 3.40 2.50 3.25 7.25 3.25 7.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25 3	Riee Starch 16@ Rose Flower, pale 656@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.9@ Styrax Asiatic .72@ Tartaric Acid (250 lb. drums) 37@ Triethanolamine .26½@ Zinc stearate, U.S.P 37@ Oxide, U.S.P 17½@ Oill.S AND FATS Castor, refined, drums .24½@ Coconut, crude, Atlantic ports, tanks .15½@ Refined, drums .23@ Corn, crude, Midwest, mill, tanks .14½@ Corn Oil, refined, tanks .17%@ Cottonseed, crude tanks .13%@	.18 .90 .1.85 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .2.71/4 .42 .181/4 .25 .16 .231/2 .141/2 .1.141/2 .
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisyl Acetate Benzyl Acetate Benzyl Acetate Benzyl Butyrate Benzyl Butyrate Benzyl Formate B	.55@ 1.00@ 2.05@ 1.00@ 1.25@ 1.25@ 1.95@ 1.95@ 1.95@ 1.95@ 1.75@ 3.75@ 1.50@ 1.60@ 1.60@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.95@ 1.55@ 1.55@ 1.55@ 1.75@ 1	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 6.75 .85 1.00 2.10 2.10 2.25 2.20 2.10 2.27 2.75 6.35 1.50 1.40 4.50 3.70 4.50 3.70 3.00 5.90 3.45	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans BOUrbon Mexican, cut Mexican, whole	2.20@ 2.10@ 2.15@ 4.60@ 2.75@ 4.10@ 1.65@ 1.65@ 3.40@ 4.35@ 3.30@ 2.65@ 1.75@ 3.00@ 3.00@ 47.50@ 9.90@ 2.35@ 4.90@ 4.90@	2.75 2.75 5.20 3.25 4.65 1.95 1.95 1.90 4.00 4.80 4.00 4.85 3.20 3.25 3.40 2.55 7.25 3.25 7.25 3.25 7.25 3.25 7.25 3.26 7.25 3.26 7.25 3.26 7.25 3.26 7.25 3.26 7.25	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 2.75@ Hydroxide, 76% solid, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.9@ Styrax Asiatie 7.2@ Tartaric Acid (250 lb. drums) 37@ Tragacanth, No. 1 2.75@ Triethanolamine 26½@ Zinc stearate, U.S.P. 37@ Oxide, U.S.P. 17½@ OiLS AND FATS Castor, refined, drums 24½@ Coconut, crude, Atlantic ports, tanks 15¼@ Refined, drums 23@ Corn, crude, Midwest, mill, tanks 1.17%@ Corn Oil, refined, tanks 1.17%@ Cottonseed, crude tanks 1.33%@ Grease, white .05½@	.18 .90 .185 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .271/4 .42 .181/4 .25 .16 .231/2 .141/2 .173/4 .1.44 .051/2
Amyl Acetate Amyl Butyrate Amyl Cirnnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Propionate Amyl Valerinate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Format	.55@ 1.00@ 1.00@ 1.00@ 3.75@ 1.25@ 1.95@ 1.95@ 1.95@ 1.95@ 1.75@ 3.75@ 1.50@ 1.50@ 1.60@ 1.90@ 2.75@ 3	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 6.75 .85 1.00 2.00 4.00 2.10 2.25 10.25 10.25 10.25 3.50 4.50 3.70 4.50 3.70 2.30 3.45 4.35	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans Bourbon Mexican, cut Mexican, whole Tahati	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.65@ 4.10@ 4.65@ 4.20@ 4.35@ 4.35@ 2.70@ 2.70@ 2.65@ 1.75@ 3.10@ 4.750@ 3.00@ 4.750@ 2.35@ 5.25@ 4.90@ 5.00@ 4.00@	2.75 2.75 5.20 3.25 4.65 1.95 1.95 1.90 4.00 4.80 6.10 3.85 3.20 1.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25 3	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic 7.2@ Tartaric Acid (250 lb. drums) 37@ Triethanolamine 261/@ Zinc stearate, U.S.P. 37@ Oxide, U.S.P. 171/@ OILS AND FATS Castor, refined, drums 241/@ Coconut, crude, Atlantic ports, tanks 151/@ Refined, drums 23@ Corn, crude, Midwest, mill, tanks 111/@ Gortonseed, crude tanks 133/@ Grease, white 051/@ Lard, Chicago 101/@	.18 .90 .1.85 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .2.71/4 .42 .181/4 .25 .16 .231/2 .141/2 .1.141/2 .
Amyl Acetate Amyl Butyrate Amyl Butyrate Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Butyrate Citronellyl Acetate Citronellyl Acetate Coumarin Cuminic Aldehyde Cyclonol	.55@ 1.00@ 2.05@ 1.00@ 1.25@ 1.25@ 1.90@ 1.95@ 1.95@ 2.15@ 2.15@ 3.75@ 1.75@ 1.80@ 1.85@ 1.75@ 2.200@ 2.75@ 1.256@ 1.256@ 3.75@ 1.256@ 3.75@ 3.7	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.00 2.10 2.25 10.25 2.20 2.10 2.75 6.35 1.51 2.75 6.35 1.51 2.70 2.30 3.70 2.30 3.70 2.30 3.45 4.35 3.70 2.30 3.45 4.35 3.15	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Propionate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans BOURDON Mexican, cut Mexican, whole Tahati Tonka Beans Surinam	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.10@ 4.10@ 4.165@ 4.20@ 4.35@ 3.40@ 4.35@ 2.70@ 80@ 80@ 80@ 80@ 80@ 80@ 80@ 80@ 80@ 8	2.75 2.75 5.20 3.25 4.67 2.95 1.95 1.95 4.00 4.80 6.10 3.85 3.20 1.25 3.40 2.50 3.25 7.25 3.25 3.25 50.00 10.25 2.80 5.50 5.50 5.25 5.00 1.30 5.25 5.00 5.25 5.00 1.30 5.30 5.30 5.30 5.30 5.30	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.9@ Styrax Asiatic .72@ Tartaric Acid (250 lb. drums) .37@ Triethanolamine .26½@ Zinc stearate, U.S.P .37@ Oxide, U.S.P .17½@ OiLS AND FATS Castor, refined, drums .24½@ Coconut, crude, Atlantic ports, tanks .15½@ Refined, drums .23@ Corn, crude, Midwest, mill, tanks .14½@ Corn Oil, refined, tanks .17½@ Cottonseed, crude tanks .13¾@ Getase, white .05½@ Lard, Chicago .10½@	.18 .90 .1.85 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .2.714 .42 .1814 .25 .16 .231½ .1.14½ .1.13¼ .1.14 .0.51½ .1.01¼
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Acetate Benzyl Butyrate Benzyl Butyrate Benzyl Formate	.55@ 1.00@ 2.05@ 1.00@ 1.25@ 1.25@ 1.95@ 1.95@ 1.95@ 1.95@ 1.75@ 3.75@ 1.50@ 1.60@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.25@ 3.75@ 1.25@ 3.75@ 1.25@ 3.75@ 3.25@ 3	70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.10 2.10 2.25 1.025 2.20 2.10 2.75 6.35 1.15/2 2.30 3.50 1.40 4.50 3.70 4.50 3.70 3.70 3.85 3.15 5.90	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans Bourbon Mexican, cut Mexican, whole Tahati	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.65@ 4.10@ 4.65@ 4.20@ 4.35@ 4.35@ 2.70@ 2.70@ 2.65@ 1.75@ 3.10@ 4.750@ 3.00@ 4.750@ 2.35@ 5.25@ 4.90@ 5.00@ 4.00@	2.75 2.75 5.20 3.25 4.65 1.95 1.95 1.90 4.00 4.80 6.10 3.85 3.20 1.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25 3	Riee Starch 16@ Rose Flower, pale 650@ Rose Flower, pale 650@ Rose Water, jug (gal.) 1.25@ Rosin, M. per cwt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.9@ 2.75@ Styrax Asiatic 72@ 72@ Tartaric Acid (250 lb. 37@ 37@ Triethanolamine 2.64.4@ 261.4@ Zinc stearate, U.S.P. 37@ 0xide, U.S.P. 17½@ OILS AND FATS Castor, refined, drums 2.4½@ Coconut, crude, Atlantic ports, tanks 1.5½@ Refined, drums 2.3@ Corn, crude, Midwest, mill, tanks 1.1½@ Corn Oil, refined, tanks 1.7%@ Corn Oil, refined, tanks 1.7%@ Cottonseed, crude tanks 1.3%@ Grease, white 0.5½@ 0.5½@ 1.0½@	.18 .90 .185 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .271/4 .42 .181/4 .25 .16 .231/2 .141/2 .101/4 .113/4 .
Amyl Acetate Amyl Butyrate Amyl Cironellyl Citronellyl Citronellyl Acetate Citronellyl Butyrate Citronellyl Acetate Citronellyl Butyrate Citronellyl Acetate Citronellyl Acetate Citronellyl Butyrate Citronellyl Acetate Citronellyl Butyrate Citronellyl Butyrate Citronellyl Acetate Citronellyl Butyrate Citronellyl Acetate Citronellyl Butyrate Coumarin Cuminic Aldehyde Cyclonol Diethylphthalate Dimethyl Anthranilate	.55@ 1.00@ 1.00@ 1.00@ 3.75@ 1.25@ 1.95@ 1.95@ 1.95@ 1.95@ 1.75@ 3.75@ 1.50@ 1.50@ 1.60@ 1.90@ 2.00@ 3.75@ 3	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 6.75 .85 1.00 2.00 4.00 4.00 2.10 2.25 10.25 10.25 3.50 3.70 4.50 3.70 4.50 3.70 4.50 3.70 4.50 3.70 4.50 3.70 4.50 3.70 4.50 3.70 4.50 3.70 6.60	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans — Bourbon Mexican, cut Mexican, whole Tahati Tonka Beans Surinam Angostura	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.10@ 4.165@ 4.20@ 4.35@ 3.40@ 4.35@ 2.70@ 8.00@ 2.70@ 8.00@ 3.10@ 6.50@ 4.7.50@ 2.35@ 5.25@ 4.90@ 4.00@ 4.00@ 4.00@ 1.65@ 1.65@	2.75 2.75 5.20 3.25 4.67 2.95 1.95 1.95 4.00 4.80 6.10 3.85 3.20 1.25 3.40 2.50 3.25 7.25 3.25 3.25 50.00 10.25 2.80 5.50 5.50 5.25 5.00 1.30 5.25 5.00 5.25 5.00 1.30 5.30 5.30 5.30 5.30 5.30	Riee Starch 16@ Rose Flower, pale 65@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.2@ Styrax Asiatic 7.2@ Tartaric Acid (250 lb. drums) 3.7@ Triethanolamine 2.261/@ Zinc stearate, U.S.P. 3.7@ Oxide, U.S.P. 1.71/@ OILS AND FATS Castor, refined, drums 2.41/@ Coconut, crude, Atlantic ports, tanks 1.51/@ Refined, drums 2.3@ Corn, crude, Midwest, mill, tanks 1.11/@ Cottonseed, crude tanks 1.33/@ Grease, white 0.51/@ Lard, Oil, common, No. 1 drums 1.11/@ Olive, edible (gal.) 2.65@	.18 .90 .1.85 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .2.714 .42 .1814 .25 .16 .231½ .1.1314 .0.51½ .1.1314 .2.75
Amyl Acetate Amyl Butyrate Amyl Butyrate Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Butyrate Citronellyl Acetate Citronellyl Acetate Citronellyl Acetate Coumarin Cuminic Aldehyde Cyclonol Diethylphthalate Diphenyl Methane	.55@ 1.00@ 2.05@ 1.00@ 1.25@ 1.25@ 1.95@ 1.95@ 1.95@ 1.95@ 1.75@ 3.75@ 1.55@ 1.80@ 1.90@ 1.90@ 1.90@ 1.255@ 3.75@ 1.256@ 3.75@ 1.256@ 3.75@ 1.256@ 3.75@ 1.256@ 3.75@ 1.256@ 3.75@ 1.256@ 3.75@ 3.75@ 1.256@ 3.75@ 1.256@ 3.75@ 1.256@ 3.75@ 1.256@ 3.75@ 1.25@ 3.75@ 1.25@ 3.75@ 1.25@ 3.75@ 1.25@ 3.75@ 1.25@ 3.75@ 1.25@ 3.75@ 1.25@ 3.75@ 3.	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.00 2.10 2.25 10.25 2.20 2.10 2.75 6.35 1.51 6.00 3.70 2.30 3.70 2.30 3.45 4.35 5.51 6.00 3.15 1.30	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans BOUrbon Mexican, cut Mexican, cut Mexican, whole Tahati Tonka Beans Surinam Angostura	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.65@ 4.10@ 4.20@ 4.35@ 4.20@ 4.35@ 2.70@ 3.40@ 4.35@ 3.10@ 6.50@ 3.10@ 6.50@ 4.7.50@ 3.30@ 4.7.50@ 2.35@ 5.25@ 4.90@ 4.90@ 4.00@ 1.05@ 1.05@ 0RUCS	2.75 2.75 2.20 3.25 4.62 1.95 1.95 1.90 4.50 4.80 6.10 3.85 3.20 1.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25 3	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 4.8@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.9@ Styrax Asiatic .72@ Tartaric Acid (250 lb. drums) 3.7@ Triethanolamine 261/@ Zinc stearate, U.S.P 3.7@ Oxide, U.S.P 1.71/@ OILS AND FATS Castor, refined, drums 2.41/@ Coconut, crude, Atlantic ports, tanks 1.51/@ Refined, drums 2.3@ Corn, crude, Midwest, mill, tanks 1.14/@ Corn oil, refined, tanks 1.73/@ Cottonseed, crude tanks 1.73/@ Grease, white .051/@ Lard, Chicago 1.01/@ Lard, Oil, common, No. 1 drums .111/@ No. 1 drums .111/@	.18 .90 .185 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .271/4 .42 .181/4 .25 .16 .231/2 .141/2 .101/4 .113/4 .
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Acetate Benzyl Butyrate Benzyl Butyrate Benzyl Formate	.55@ 1.00@ 1.00@ 1.00@ 1.25@ 1.25@ 1.95@ 1.95@ 1.95@ 1.75@ 1.75@ 1.50@ 1.60@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.55@ 1.55@ 1.55@ 1.55@ 1.55@ 1.55@ 1.55@ 1.55@ 1.55@ 1.55@ 1.55@ 1.55@ 1.55@ 1.55@ 1.55@ 1.60@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.10 2.25 1.025 2.20 2.10 2.75 6.35 .15 2.20 3.50 1.40 4.50 3.70 4.50 3.70 4.50 3.70 4.50 3.70 3.70 4.50 3.70 3.70 4.50 3.70 3.70 3.70 4.70 3.70 3.70 3.70 3.70 3.70 3.70 3.70 3	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetate Phenylacetate Phenylacetic Acid Phenylethyl Acetate Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans BEANS Vanilla beans BEANS Vanilla beans Surinam Angostura SUNDRIES AND E Acetone	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.10@ 4.10@ 4.165@ 4.20@ 4.35@ 3.40@ 4.35@ 3.30@ 3.30@ 3.00@ 47.50@ 3.00@ 47.50@ 3.00@ 47.50@ 5.25@ 4.90@ 5.00@ 4.00@ 1.65@ RUGS 1.01/4@	2,75 2,75 5,20 3,25 4,61 2,25 1,95 1,95 4,00 4,80 6,10 3,85 3,20 1,25 3,40 2,50 3,25 7,25 3,25 50,00 10,25 2,80 5,50 Nom'l, 1,30 1,80	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 2.75@ Hydroxide, 76% solid, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.2@ Styrax Asiatic .72@ Tartaric Acid (250 lb. drums) 37@ Tragacanth, No. 1 2.75@ Triethanolamine .26½@ Zinc stearate, U.S.P. .37@ Oxide, U.S.P. .17½@ OiLS AND FATS Castor, refined, drums .24½@ Coconut, crude, Atlantic ports, tanks .15½@ Refined, drums .23@ Corn, crude, Midwest, mill, tanks .14½@ Corn, crude, Midwest, mill, tanks .14½@ Grease, white .05½@ Lard, Oil, refined, tanks .13½@ Grease, white .05½@	.18 .90 .185 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .271/4 .42 .181/4 .25 .16 .231/2 .101/4 .113/4 .2.75 .21
Amyl Acetate Amyl Butyrate Amyl Cirnnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Popionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Acetate Benzyl Butyrate Benzyl Butyrate Benzyl Ginnamate Benzyl Formate Benzyl Forma	1.00@ 1.00@ 1.00@ 1.00@ 1.200@ 1.250@ 1.950@ 1.950@ 1.950@ 1.750@ 1.750@ 1.750@ 1.500@ 1.600@ 1.600@ 1.900@ 2.750@ 3.750@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 6.75 .85 1.00 2.10 2.25 1.220 2.10 2.25 1.220 2.10 2.75 3.50 3.70 3.70 3.70 3.84 4.50 3.70 3.70 3.70 3.70 3.70 3.70 3.70 3.7	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans Bourbon Mexican, cut Mexican, cut Mexican, whole Tahati Tonka Beans Surinam Angostura SUNDRIES AND E Acetone Ambergris, ounce	2.20@ 2.10@ 2.10@ 4.60@ 4.65@ 4.10@ 4.20@ 4.20@ 4.35@ 4.20@ 4.35@ 3.30@ 2.75@ 3.30@ 2.65@ 1.75@ 3.00@ 3.30@ 4.750@ 4.00@	2.75 2.75 2.75 5.20 3.25 4.65 1.95 1.90 4.00 4.80 6.10 3.85 3.20 1.25 3.40 2.50 3.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic 7.2@ Tartaric Acid (250 lb. drums) 3.7@ Triethanolamine 2.261/@ Zinc stearate, U.S.P. 3.7@ Oxide, U.S.P. 1.71/@ OiLS AND FATS Castor, refined, drums 2.41/@ Coconut, crude, Atlantic ports, tanks 1.51/@ Refined, drums 2.3@ Corn, crude, Midwest, mill, tanks 1.11/@ Corn Oil, refined, tanks 1.73/@ Cottonseed, crude tanks 1.33/@ Grease, white 0.51/@ Lard, Oil, common, No. 1 drums 1.11/@ Olive, edible (gal.) 2.65@ <t< td=""><td>.18 .90 .185 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .2.71 .42 .181 .42 .181 .42 .173 .14 .0.51 .12 .101 .113 .4 .2.75 .21 .131 .4</td></t<>	.18 .90 .185 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .2.71 .42 .181 .42 .181 .42 .173 .14 .0.51 .12 .101 .113 .4 .2.75 .21 .131 .4
Amyl Acetate Amyl Butyrate Amyl Butyrate Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Cinnamate Benzyl Formate Bityl Acetate Citronellyl Acetate Citronellyl Acetate Coumarin Cuminic Aldehyde Cyclonol Diethylphthalate Diphenyl Methane Diphenyl Methane Diphenyl Oxide Ethyl Acetate	.55@ 1.00@ 1.00@ 1.00@ 1.25@ 1.25@ 1.95@ 1.95@ 1.95@ 1.95@ 1.75@ 3.75@ 1.55@ 1.80@ 1.90@ 1.90@ 1.90@ 1.255@ 3.75@ 1.256@ 3.75@ 3.75@ 1.256@ 3.75@ 1.256@ 3.75@ 1.256@ 3.75@ 3.75@ 1.256@ 3.75@ 3	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.00 2.10 2.25 10.25 2.20 2.10 2.75 6.35 1.51 6.00 3.70 2.30 3.70 2.30 3.70 2.30 3.70 3.70 2.30 3.70 3.70 3.70 3.70 3.70 3.70 3.70 3	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetate Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans Bourbon Mexican, cut Mexican, cut Mexican, whole Tahati Tonka Beans Surinam Angostura SUNDRIES AND E Acetone Ambergris, ounce Balsam, Copaiba	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.65@ 4.10@ 4.35@ 4.20@ 4.35@ 2.70@ 8.00@ 1.65@ 3.10@ 6.50@ 1.75@ 3.10@ 6.50@ 1.75@ 3.00@ 4.90@ 2.35@ 5.25@ 4.90@ 4.90@ 1.65@ 8.00@ 1.65@ RUGS 8.00@ 8.00@ 8.00@ 8.00@ 8.00@ 8.00@ 8.00@ 8.00@	2.75 2.75 5.20 3.25 4.67 1.95 1.90 4.50 4.00 4.80 6.10 3.85 3.20 1.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25 3	Riee Starch 16@ Rose Flower, pale 656@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt. 8.40@ Salicylic Acid U&P 4.8@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.9@ Styrax Asiatic .72@ Tartaric Acid (250 lb. drums) 37@ Triethanolamine .26¼@ Zinc stearate, U.S.P. 37@ Oxide, U.S.P. 17¼@ OILS AND FATS Castor, refined, drums .24½@ Coconut, crude, Atlantic ports, tanks .15¼@ Refined, drums .24½@ Corn, crude, Midwest, mill, tanks .14½@ Corn, crude, Midwest, mill, tanks .14½@ Cottonseed, crude tanks .13¾@ Cottonseed, crude tanks .13¾@ Cottonseed, crude tanks .2.65@ Lard, Oil, common, No. 1 drums .11¼@	.18 .90 .185 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .271/4 .42 .181/4 .25 .16 .231/2 .101/4 .113/4 .2.75 .21
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Acetate Benzyl Butyrate Benzyl Butyrate Benzyl Formate Citronellyl Acetate Citronellyl Acetate Citronellyl Anthranilate Diphenyl Methane Diphenyl Methane Diphenyl Oxide Ethyl Butyrate	.55@ 1.00@ 1.00@ 1.00@ 1.00@ 1.25@ 1.00@ 1.95@ 1.00@ 1.95@ 1.75@ 85@ 1.75@ 1.50@ 1.60@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.75@ 1.55@ 1.55@ 1.75@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.10 2.10 2.10 2.25 2.20 2.10 2.75 6.35 1.51 6.35 3.70 2.30 3.60 5.90 5.90 3.45 4.35 3.51 6.00 1.30 6.00 1.30 6.00 1.30 6.00	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Propionate Phenylethyl Salicylate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans BOURDON Mexican, cut Mexican, whole Tahati Tonka Beans Surinam Angostura SUNDRIES AND E Acetone Ambergris, ounce Balsam, Copaiba Ganada fir, gal.	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.10@ 4.10@ 4.165@ 4.20@ 4.35@ 3.40@ 4.35@ 3.30@ 3.30@ 3.00@ 47.55@ 3.10@ 5.25@ 4.90@ 5.00@ 4.90@ 6.50	2.75 2.75 5.20 3.25 4.67 2.25 1.95 1.95 4.00 4.80 6.10 3.85 3.20 1.25 3.40 2.50 3.25 7.25 3.25 3.25 50.00 10.25 2.80 5.50 5.25 5.00 1.10 1.30 1.80	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt. 8.40@ Salicylic Acid U&P .48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 2.75@ Hydroxide, 76% solid, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 2.9@ Styrax Asiatic .72@ Tartaric Acid (250 lb. drums) .37@ Tragacanth, No. 1 2.75@ Triethanolamine .26½@ Zinc stearate, U.S.P. .37@ Oxide, U.S.P. .37@ Oxide, U.S.P. .17½@ OILS AND FATS Castor, refined, drums .24½@ Coconut, crude, Atlantic ports, tanks .15½@ Refined, drums .23@ Corn, crude, Midwest, mill, tanks .1½@ Corn Oil, refined, tanks .17½@ Corn Oil, refined tanks .17½@ Grease, white .05½@ Lard, Oil, common, No. 1 drums .11½@	.18 .90 .185 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .271/4 .42 .181/4 .25 .16 .231/2 .173/4 .113/4 .2.75 .21 .131/4 .153/4
Amyl Acetate Amyl Butyrate Amyl Cinnamic Aldehyde Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Salicylate Amyl Valerinate Anethol Anisyl Acetate Benzyl Acetate Benzyl Acetate Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Salicylate Benzyl Formate Benzyl Format	.55@ 1.00@ 1.00@ 1.00@ 1.205@ 1.25@ 1.95@ 1.95@ 1.95@ 1.95@ 1.75@ 3.75@ 1.50@ 1.60@ 1.60@ 1.60@ 1.90@ 1.90@ 1.90@ 1.95@ 3.75@	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 6.75 .85 1.00 2.10 2.20 2.10 2.25 2.20 2.10 2.75 6.35 1.40 4.50 3.70 4.50 3.70 4.50 3.71 4.50 3.75 1.600 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetate Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Propionate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans BOURDON Mexican, cut Mexican, cut Mexican, whole Tahati Tonka Beans Surinam Angostura SUNDRIES AND E Acetone Ambergris, ounce Balsam, Copaiba Canada fir, gal. Peru	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.65@ 4.10@ 4.35@ 4.20@ 4.35@ 2.70@ 8.00@ 1.65@ 3.10@ 6.50@ 1.75@ 3.10@ 6.50@ 1.75@ 3.00@ 4.90@ 2.35@ 5.25@ 4.90@ 4.90@ 1.65@ 8.00@ 1.65@ RUGS 8.00@ 8.00@ 8.00@ 8.00@ 8.00@ 8.00@ 8.00@ 8.00@	2.75 2.75 5.20 3.25 4.67 1.95 1.90 4.50 4.00 4.80 6.10 3.85 3.20 1.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25 3	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 48@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 29@ Styrax Asiatic 7.2@ Tartaric Acid (250 lb. drums) 3.7@ Triethanolamine 2.26½@ Zinc stearate, U.S.P. 3.7@ Oxide, U.S.P. 1.7½@ OILS AND FATS Castor, refined, drums 2.4½@ Coconut, crude, Atlantic ports, tanks 1.5¼@ Refined, drums 2.3@ Corn, crude, Midwest, mill, tanks 1.1½@ Corn Oil, refined, tanks 1.7%@ Lard, Chicago 1.0½@ Lard, Chicago 1.0½@ Lard, Chicago 1.0½@ Lard, Oil, common, No. 1 drums 1.0½@ No. 1 drums	.18 .90 .185 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .2.71 .42 .181 .42 .173 .4 .14 .0.51 .2.10 .14 .11 .34 .2.75 .21 .131 .4 .153 .4 .141 .2 .75 .21 .131 .4 .153 .4 .141 .2 .75 .21 .131 .4 .153 .4 .141 .2 .75 .21 .131 .14 .153 .4 .141 .2 .75 .21 .131 .4 .153 .4 .141 .2 .75 .21 .131 .141 .153 .4 .141 .2 .75 .21 .131 .141 .153 .4 .141 .2 .75 .21 .131 .141 .141 .2 .75 .21 .131 .141 .141 .141 .141 .141 .141 .14
Amyl Acetate Amyl Butyrate Amyl Butyrate Amyl Formate Amyl Phenylacetate Amyl Propionate Amyl Propionate Amyl Salicylate Amyl Valerinate Amyl Salicylate Amyl Valerinate Anethol Anisic Aldehyde Anisyl Acetate Benzyl Acetate Benzyl Alcohol Benzyl Butyrate Benzyl Butyrate Benzyl Formate Benzyl Salicylate Benzyl Formate Benzyl Formate Brenzyl Formate Brenzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Benzyl Formate Brenzyl Formate Brenzyl Formate Brenzyl Formate Citronellyl Acetate Citronellyl Acetate Citronellyl Butyrate Coumarin Cuminic Aldehyde Cyclonol Diethylphthalate Diphenyl Methane Diphenyl Methane Diphenyl Methane Diphenyl Methane Diphenyl Oxide Ethyl Renzoate Ethyl Cinnamate	1.55@ 1.00@ 1.00@ 1.00@ 1.25@ 1.95@ 1.95@ 1.95@ 1.95@ 1.95@ 1.75@ 1.75@ 1.75@ 1.75@ 1.85@ 1.75@ 1.80@ 1.90@ 1.90@ 1.90@ 1.90@ 1.90@ 1.55@ 1.75@ 1.25\$@ 1.75@ 1.25\$@ 1.75@ 1.25\$@ 1.75@ 1.25\$@ 1.75@ 1.25\$@ 1.75@ 1.25\$@ 1.75@ 1.25\$@ 1.75@ 1.25\$@ 1.75@ 1.25\$@ 1.75@ 1.25\$@ 1.75@ 1.25\$@ 1.75@ 1.25@ 1.75@ 1.25@ 1.75@ 1.25@ 1	.70 1.25 2.40 1.25 4.10 1.60 2.40 1.35 2.65 6.75 .85 1.00 2.00 2.10 2.25 2.20 2.25 2.20 2.275 6.35 2.35 1.40 4.50 3.70 2.30 3.70 2.30 3.45 4.35 5.51 6.00 1.3075 3.55 6.35 5.90 3.45 4.35 3.15 5.51 6.00 9.55 2.85 3.45	Paracresyl Acetate Paracresyl Methyl Ether Paracresyl Phenylacetate Phenylacetaldehyde 50% 100% Phenylacetic Acid Phenylacetic Acid Phenylethyl Acetate Phenylethyl Alcohol Phenylethyl Butyrate Phenylethyl Salicylate Phenylethyl Valerianate Phenylethyl Valerianate Phenylpropyl Acetate Phenylpropyl Acetate Phenylpropyl Acetate Thymol, crystals Vanillin, eugenol (Guaiacol) Lignin Vetiver Acetate Violet Ketone Alpha Yara Yara (Methyl ether) BEANS Vanilla beans Bourbon Mexican, cut Mexican, cut Mexican, whole Tahati Tonka Beans Surinam Angostura SUNDRIES AND E Acetone Ambergris, ounce Balsam, Copaiba Canada fir, gal. Peru Beeswax, bleached, pure	2.20@ 2.10@ 2.10@ 4.60@ 4.60@ 4.65@ 4.10@ 4.35@ 4.35@ 4.35@ 2.70@ 4.35@ 2.70@ 4.30@ 4.35@ 3.10@ 6.50@ 3.10@ 6.50@ 4.75@ 3.10@ 6.50@ 4.90@ 2.35@ 5.25@ 4.90@ 4.90@ 1.65@ 8.00@	2.75 2.75 2.75 5.20 3.25 4.65 1.95 1.90 4.80 6.10 3.85 3.20 1.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25 3	Riee Starch 16@ Rose Flower, pale 65@ Rose Water, jug (gal.) 1.25@ Rosin, M. per ewt 8.40@ Salicylic Acid U&P 4.8@ Saponin No. 1 2.75@ Silicate, 40° drums, works, 100 pounds 1.70@ Sodium Carb. 58% light, 100 pounds 2.75@ Hydroxide, 76% solid, 100 pounds 4.80@ Spermaceti 2.9@ Styrax Asiatic 7.2@ Tartaric Acid (250 lb. drums) 3.7@ Triethanolamine 261/@ Zinc stearate, U.S.P. 3.7@ Oxide, U.S.P. 1.71/@ OiLS AND FATS Castor, refined, drums 2.41/@ Coconut, crude, Atlantic ports, tanks 1.51/@ Refined, drums 2.3@ Corn, crude, Midwest, mill, tanks 1.13/@ Cottonseed, crude tanks 1.73/@ Cottonseed, crude tanks 1.73/@ Cottonseed, crude tanks 1.23/@ Cottonseed, crude, tanks 2.0@ Red Oil, common, No. 1 drums 1.11/@ Nouble	.18 .90 .185 .53 .2.80 .2.30 .4.52 .4.90 .30 .78 .41 .3.20 .2.71 .42 .181 .42 .181 .42 .181 .25 .16 .231 .2 .101 .4 .131 .4 .2.75 .21 .131 .4 .153 .4
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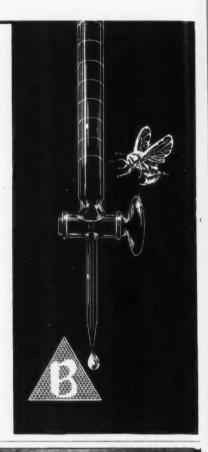


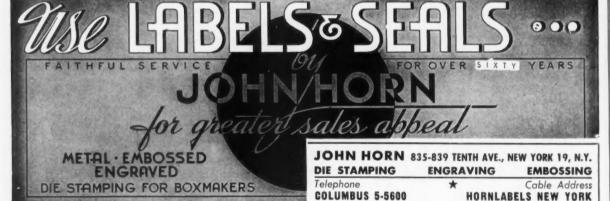
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